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# KEITH'S MAGAZINE

October  
1917

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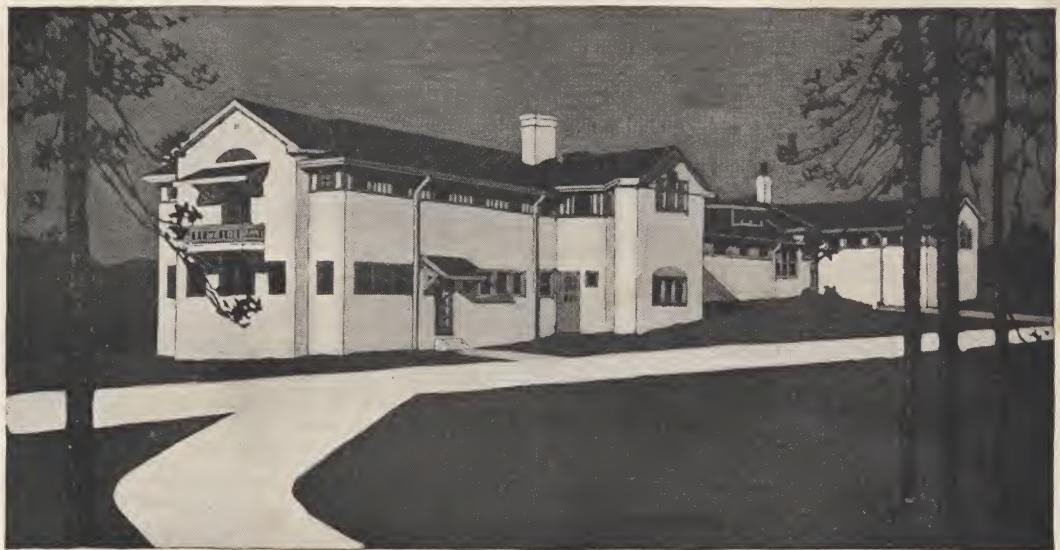
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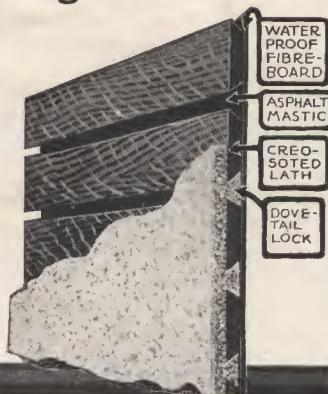
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# Where to Obtain Building Material and New Home Equipment

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W. W. Purdy, 831 McKnight Bldg., Minneapolis, Minn.  
Sedgwick, Chas. S., 1135K Lumber Exchange, Minneapolis.  
E. W. Stillwell & Co., 458 Henne Bldg., Los Angeles.  
Jud Yoho, 470 Bungalow Bldg., Seattle, Wash.

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Whitney Window Corp., 311 S. Fifth St., Minneapolis, Minn.

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Majestic Co., The, 606 Erie St., Huntington, Ind.

## Doors.

Chicago Millwork Supply Co., Chicago, Ill.  
Harris Bros. Co., Chicago, Ill.  
Morgan Sash & Door Co., Dept. A-27, Chicago, Ill.

## Door Hangers.

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Harris Bros. Co., Dept. Y-64, 35th and Iron Sts., Chicago, Ill.  
Haynes-Langenberg Mfg. Co., 4062 Forest Park Blvd., St. Louis, Mo.  
Hess Warming & Ventilating Co., 1217 Tacoma Bldg., Chicago, Ill.  
Williamson Heater Co., 96 5th St., Cincinnati.

## Heat Regulators.

Minneapolis Heat Regulator Co., 2725 4th Ave. So., Minneapolis, Minn.

## Kitchen Cabinets.

Hoosier Mfg. Co., New Castle, Ind.

## Lighting Fixtures.

Biddle-Gaumer Co., 3846 Lancaster Ave., Philadelphia, Pa.

## Lumber and Flooring.

Chicago Millwork Supply Co., Chicago, Ill.  
Gum Lumber Mfgrs. Assn., Bank of Commerce Building, Memphis, Tenn.  
Harris Bros. Co., Chicago, Ill.  
North Carolina Pine Assn., Norfolk, Va.  
Northern Hemlock & Hardwood Mfrs. Assn., Oshkosh, Wis.  
Oak Flooring Bureau, 1603 Union Trust Bldg., Cincinnati, Ohio.  
Southern Cypress Mfrs. Assn., Hibernia Bank Bldg., New Orleans, La.  
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(Continued on page 209.)

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(Continued from page 206.)

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Harris Bros. Co., Dept. Y-64, Chicago, Ill.  
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cago, Ill.

### Paint.

Lowe Bros. Co., 465 E. 3d St., Dayton, Ohio.  
National Lead Co., 111 Broadway, New  
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### Plumbing Goods.

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cago, Ill.

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Canton Metal Ceiling Co., Canton, O.

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Asphalt Ready Roofing Co., 9 Church St.,  
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Edwards Mfg. Co., 521-541 Culvert St., Cin-  
cinnati.

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### Shingles (Asphalt).

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# KEITH'S + MAGAZINE +

## ON HOME-BUILDING

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## Just a Word

### Back From Vacation.



HAT did you bring back with you from your vacation? You didn't take one? Too bad! No worker can afford to get along without vacation.

If you are doing the really efficient work, which everyone expects to do, you ought not to allow yourself to "draw on your principal" of vital force. You would not do it in money matters, and no one can buy strength when he is once broken down,—as every great health resort in the country bears witness. It is possible to buy hands or even an artificial leg, but you can't buy a new set of nerves.

But, having taken your vacation, what are you bringing back to your work? A vacation does not mean just a little time that may be wasted if you want to squander it,—except where just that sort of thing will take the corners off the jagged nerves.

To the healthy man it is the opening of a new set of peep-holes into the world outside of himself and his work;—the big world with which he has been too busy to keep closely in touch.

A man or a woman can not go on doing the same thing over and over again, year in and year out, with never a break, and still do it efficiently.

Business has come to realize that it is not what employees do with their hands, important as that may be; it is what they do with their heads that, in the final count, makes the business a success.

A man may take his hands away from activities of the business while his interest is so tangible a thing that it works subconsciously. Such an interest will bring back from a vacation many a stray thought which will take forceful shape when he gets back into the harness;—with a sigh of comfort as he takes up again the thing of which he feels himself to be master, and plans for a big year's work.

No time is so good to study plans for the new home as when you are seeing how other people live, as opportunity offers during your vacation. Bring out your old sketches, when you get back—and look them over again.

The cottage at the beach had a very good solution for that vexed problem, and it fits very nicely into your pet plan. That new house you went through while you waited at the junction had some good devices, too.

A little survey will show that altogether you brought back from your vacation a good deal more than just the "punch" which you are now putting into your work.

# KEITH'S MAGAZINE ON HOME BUILDING

CONTENTS FOR OCT., 1917

	Page
Just a Word .....	210
Garden Accessories— <i>Franklin Boyd</i> .....	213
Some Beautiful Portland Homes— <i>Louise N. Johnson</i> .....	216
Colonial Stucco Houses— <i>Anthony Woodruff</i> .....	220
Pre-Cast Walls for the Stucco House .....	223
Efficiency in the Home—Part III— <i>Edith M. Jones</i> .....	227
Some Charming Stucco Homes— <i>Katherine Keene</i> .....	229
The Swing of the Pendulum—Modern Building with an Ancient Material.....	232
A Simple Substantial Home for the Smallest Possible Expenditure.....	234
Stucco for the Home Beautiful .....	237
A Stucco House Built in Minnesota.....	239
Stucco for the Elaborate Home or for the Bungalow .....	241
A Complete Modern Cottage .....	243
Combination in Building Materials.....	244

## DEPARTMENTS

Inside the House—	
Decoration and Furnishing.....	251
Answers to Questions on Interior Decoration .....	258
Household Economics .....	264
The Table and Its Service.....	266
Building Material and Notes on Heating, Lighting and Plumbing .....	270
Woods and How to Use Them .....	276
Splinters and Shavings .....	280



A modern adaptation of the cloister—Seculion without being shut in.

# KEITH'S MAGAZINE

VOL. XXXVIII

OCTOBER, 1917

No. 4

## Garden Accessories

Franklin Boyd

**H**OMES are necessities, but gardens are play spots. Never-the-less into the garden do many men and women put the most real part of their living. As the artist paints his picture, so does the garden-lover build up his little spot of the great out-doors.

With the development of the country house the scope of the garden has outgrown the bit taken from the lawn and devoted to flowers and shrubs and has become the heart of a beautiful estate with its pergolas, summer house, and pool, with seats prepared for a certain amount of living out of doors, with beautiful vistas leading both to and from the house. The design of the garden is often quite as carefully worked out as that of the house.

In the small homey garden a rustic treatment is often adopted, using the material most easily at hand. As the science of landscape gardening has grown, the facility with which cement can be worked and its ready adaptability, as to form, texture and also the possible use of color have made it very acceptable to the gardener. For fountains and for garden urns, for sundials and for seats, the most beautiful forms, ancient



Terminating the garden wall.

or modern can be duplicated, while for the ever popular pergola, cement or stucco in some form are ever ready.

America has hardly learned to think and to design in the terms of a plastic substance so that the beauty of concrete design is hampered by the thought of imitation stone, and much of the possibilities for beauty which is intrinsic in the plastic material is missed. Nevertheless results are being obtained which indicate something of the marvelous development which is before it. The possible use of color in connection with either stucco and cement is almost without limit, and herein lies one of its happiest forms of development. Garden urns with inset colored tile and mosaic as part of the design are shown in the illustrations.

For the garden wall and to close the vista of the garden, looking through the pergola and past the fountain and pool, what would satisfy the eye as being adequate in a happier way than the terminal shown in the illustration. The relief work is modeled and cast in pieces which are set into the stucco wall. Only a glimpse is obtained of the stucco garden wall which this terminates, but it is a charming bit with its brick coping and the relief of the lattice.

A happy solution for the garden walk is also shown in one of the illustrations. The hard, plain line of a cement walk never



Tile and Mosaic for decoration.

looks quite in keeping with the rest of the garden. The softer gravel or cinder walks are not satisfactorily under foot. Flat stones set a little apart in the English way, are very effective but difficult to get in place. Stepping stones of concrete set a little apart seem to solve the difficulty. They are good to look at;

they may be set to form any curve, by utilizing the space between. Set low in the grass they are good-looking and effective while at the same time they are thoroughly substantial under foot. They are very easy to obtain and to lay.

For garden seats and ornaments the use of cement is limited only by cost and ability. A beautiful piece of work in



*Irving J. Gill, Architect.*  
Stepping stones for the garden walk.

white concrete has the endurance of a piece of marble and much the same type of beauty. It is worthy of the most skilled effort, or the simplest, and it repays either in the beauty of the result.

The sundial which "marks only sunny hours" does not lose its popularity, though the bird bath, in its thoughtfulness for the little feathered friends, has become a favorite addition to the garden, and may be found in many types of graceful shape and pleasing color. The garden urn is always among the first additions when the garden begins to grow in scope, and it has been the subject of some very interesting developments in the use of concrete with reference to color as well as form.

The use of color with concrete is hardly past its formative stage, perhaps. The authorities tell us that color is given to concrete by the use of dry mineral colors mixed with the sand before it is mixed with the cement. Permanency of the color is one of the most important questions. Blacks are safe as a rule we are told. Ultra-marine blue, if of good quality, will hold its color for a number of years, and generally possesses the virtue of fading out evenly, when it does finally lose its color. It cannot be classed as a permanent color, as is black, brown or ochre.

Color may be introduced into garden pottery and accessories very effectively by the use of tile, set in the concrete, or by Mosaic so inset as to enrich the surface as a part of the design. The materials used for Mosaic are small squares of marble or of glass of different colors, sometimes including gold. This process goes back to the farthest antiquity and



Inlaid Mosaic for garden urn.

has always given beautiful results. To make their color brighter the bits of stone used for the Mosaic may be soaked in linseed oil for several hours, we are told, and then set in the soft mortar. While most people are more or less familiar with the term Mosaic, few realize how simply it can be done and how much is added to a concrete surface to give it such an enrichment.

The tesserae, as the bits are called of which the Mosaic is made, may be oiled from time to time to keep them bright. Two garden urns are shown with inlaid Mosaic in the design.

# Some Beautiful Portland Homes

Louise N. Johnson



T seems but fitting that residents of this scenic city of the Northwest, silhouetted against a background of snow-capped mountains, should build homes blending with the city's natural beauty. The plans and dreams of home lovers, made into a real-

like an English cottage, was designed by Ellis F. Lawrence, Dean of Architecture. The home fairly breathes hospitality. It is situated on a slightly knoll overlooking Laurelhurst, a scenic park at the foot of a cluster of hills, dotted with lakes. The wide porch and the principal rooms face



The wide porches face the park.

*Ellis F. Lawrence, Architect.*

ity, lend a distinctive and homey atmosphere to its dwellings.

The two "shingle-thatch" homes illustrated represent neither the most costly nor the least expensive, but they are homes that have been completed this year, whose individuality has a particular appeal. With the improvement of the grounds and the wealth of luxuriant shrubbery and vines which make Portland dear to flower lovers, these homes will leave little to be desired, not only as models of the craftsman's art, but as cozy, homey and substantial structures.

The farmhouse of Paul J. Murphy, built

the park. The view of the house as seen from the park shows its architecture to better advantage, but I have also chosen a photograph of the house facing the street, as it brings out more effectively the beauty of the tapering lines and the unusually striking appearance of the shingle-thatch roof. The garage is built in as part of the house, the same roof extending over both.

The color scheme is of natural stucco, with crushed marble used in the last coat, relieved by old ivory trim on the windows and an edge of brown trim on the cornices. The roof is of green, a color



Built like an English cottage.

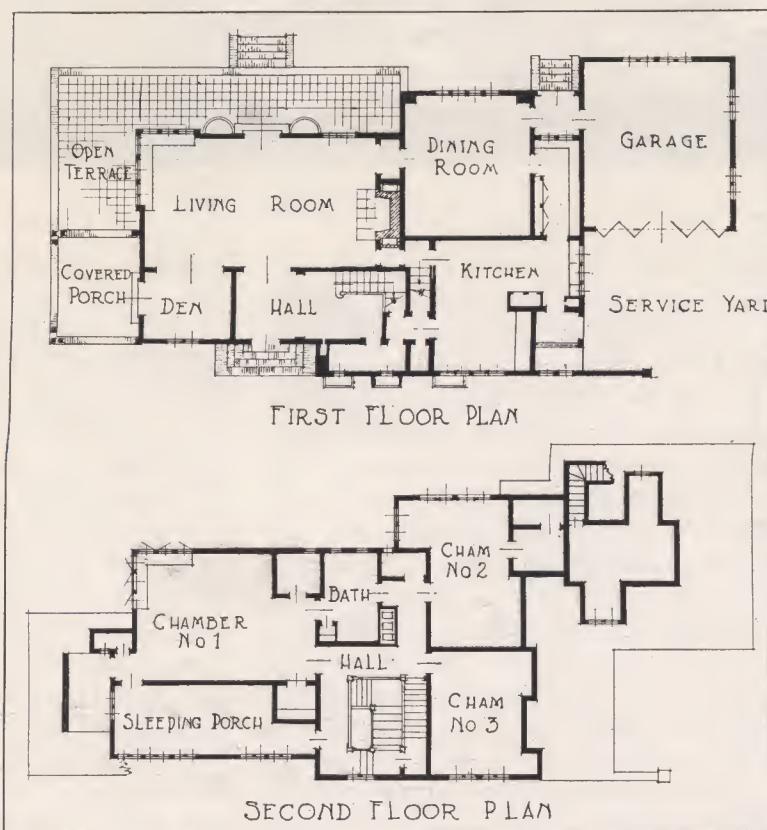
*Ellis F. Lawrence, Architect.*

named by the architect as a faded out olive green. The color arrangement suits the surroundings so admirably that it seems to be built into the scenery. The shrubbery planted in the park strip only this year is a wide variety of evergreen shrubs. This placement was for the purpose of increasing in effect the distance between the house and the street.

The roomy porch, extending entirely around the east and south sides of the house is a typical English farmhouse porch, and directly overlooks the park. French doors open from it into the living room. Chinese furniture, brightened here and there with bright cushions, enhances its attractive-

ness. As will be noted, only a portion of the porch is covered.

The finish throughout the house is rich



old ivory, the only contrasting material being the mahogany doors in the dining room, and the stairs and rail in the hall.

The hall, truly the index to the home, is purely Colonial, with the dignified simplicity that only a fine old Colonial hall can achieve. Old Turkish rugs add a touch of richness.

The interest around which the living room centers is the hearth. The wide fireplace is in the west end of this spacious

of a field scene, a field in bloom, gives charm and character. A feature of this room is the two Colonial cabinets built cornerwise.

The second floor is also furnished throughout in old ivory. Each room has its spacious and comfortable window seats covered with wicker, with flowered cushions here and there. The walls are papered in Colonial style, the paper being of tapestry effect. The curtains are of



*Dwight Cheney, Designer*

room. The mantel of old ivory is very imposing. Deep and spacious window seats are under the windows, covering the radiators. Note the delightful arrangement of the many windows overlooking the park. The walls of the living room are olive green, the hand tufted Austrian rug being of the same shade, and give the room an inviting and homelike air. Seclusion and comfort pervade the den, or what is really a library. The color scheme is carried out the same as in the living room, in olive green. The furniture is well chosen and admirably arranged, and signifies comfort and rest. The old fashioned bookcases of old ivory are built in.

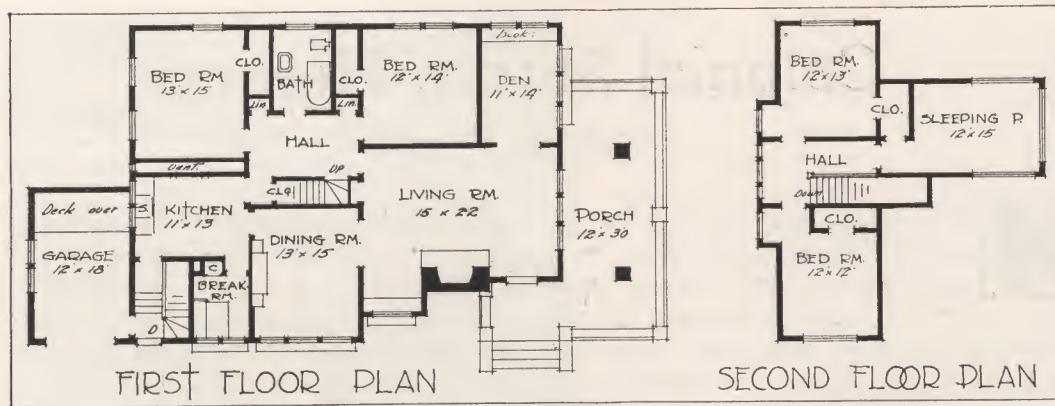
The furnishing of the dining room reflects its cheer. A frieze painted on canvas,

pink silk. The furniture in the large main bedroom is of the Adam period.

Little description is needed of the unique sleeping porch. It appears to be literally grooved in the roof. The third floor is devoted to the servants' quarters, with chambers and bath. A rear stairway leads to this floor.

A drive leads into the adequate service yard and garage. A high fence, over which vines will be twined, hide this view of the rear from the street.

Could anything be more pleasing to the eye than this thatch-roof bungalow, an echo of the low rambling homes in Ireland and Scotland? Following their lines, the designer of this home, Dwight Cheney, built a modern, up-to-date bunga-



low. After all, the essential of every house is that it be a "home," whether large or small, costly or lowly.

Where this house differs from the average low built bungalow is that it not only appears low and rambling, but it is low. This is really the keynote to its fascination. Observe the graceful tapering lines of the roof. Its length is accentuated by there being no second floor over either the front or the rear of the house, and the garage being housed under the same roof at the rear. It is to be noted that the top of the entrance door is very close under the eaves.

It seems that the chimneys on the old fashioned houses must have been of such a style as this, as the chimney suits this bungalow so admirably.

The material used in its construction is stucco, giving a rich cream tint. The shingle-thatch roof is harmoniously painted light green, and the trim is a rich cream, or old ivory. The lattice work, also in old ivory, is very effective.

The interior of this dainty bungalow is equally, if not more pleasing. Throughout, the finish is of old ivory, the only exception being the kitchen, which is in white enamel.

The entrance opens directly into the well proportioned and commodious living room. As in days of yore, interest is

focused in the fireplace, which is of tile with wood mantel. A charming little alcove, with small paned windows overhead, and a spacious comfortable window seat, unite to create an atmosphere of comfort and repose. A French door opens from the living room into the den, whose principal characteristic is restful harmony. A built-in desk and bookcases cover the entire wall space on one side.

A unique feature of this house is the hall, which is almost in the center of the house, and has access to the living room, two bedrooms, bath, kitchen and the upstairs, truly a clever arrangement.

The china closet, built in the paneling of the delightfully informal breakfast room, is particularly quaint and striking in design, as is also the buffet in the dining room. A door beside the grade entrance opens to the garage.

A pleasing finishing touch, which adds much to the old ivory finish used throughout the house, is the use of yacca wood trim. A two-inch strip of this wood, which is lighter in color than Circassian walnut, and is a beautiful combination with old ivory, is inlaid at the very edge of the mantel over the fireplace, the bookcases in the den, the plate rail and the buffet. It is much softer than mahogany, and blends rather than contrasts with the ivory finish.

# Colonial Stucco Houses

Anthony Woodruff



HAT stucco was used by the Colonial builders and that there are stucco houses dating back even to the early part of the eighteenth century may come as a surprise to those who are not familiar with

the fine old mansions of Germantown and vicinity that we find the interesting old stucco houses. In each locality, the Colonial builder used, generally of necessity, the materials which he found at hand. His choice of materials depended on



Vanderbeek house, Hackensack, N. J., built about 1717.

Courtesy Atlas Cement Co.

some of the older "down East" buildings. Notable among these are the old Wyck homestead in Germantown which was used as a hospital during the Revolutionary war, and the Vanderbeek house at Hackensack, N. J., which was built about 1717.

The Colonial houses of New England and of Virginia were as a rule built of wood. It is in the curious old Dutch homesteads of northern New Jersey and

whether he was building among the pine forests of New England, in the stone ledges of Pennsylvania, or in some place where home burned brick was available. In New Orleans stucco was used over walls of home-made brick, and even some times over brick and half timber.

The quaint old Dutch homesteads in northern New Jersey were built by the Dutch settlers who left New York while it was still called "New Amsterdam" and



Courtesy Atlas Cement Co.  
Corner of Vanderbeek house.

went across the Hudson to the fertile valleys. They handled their material with rare skill and these houses which they built have, both in form and detail, a charm which they still retain.

The houses at Germantown were built, we are told, by the descendants of the thirteen Germans who formed a community on the outskirts of the English Quaker settlement of Philadelphia. Most of these fine old buildings date well back of the Revolutionary war and not a few bear the scars of the battle of Germantown. Stucco was very commonly used for the houses in this vicinity.

The old Wyck house, one of the finest examples, has been used as a model for some of our very interesting modern work. Tradition says that this house was originally two

houses with a driveway between.

"The walls of the Germantown houses are built of the well known native ledge stone, which comes from the quarry in long, flat pieces, varying in color from bluish-gray to a warm mottled brown. The stone makes an unusually charming wall and has been used very extensively in modern work around Philadelphia. As it comes from the quarry it is quite soft and porous, easily split and broken, but hardens somewhat with age and exposure. It was undoubtedly the soft and porous nature of the stone which led the early builders to employ stucco as a protective coating. In a number of cases the stucco was applied only on the north walls, which evidently bore the brunt of the prevailing storms.

The stone was laid in mortar



Doorway of the Wyck house.

composed of coarse sand and lime, the latter probably from the old lime kilns up the Schuylkill River, although it is not unlikely that the earliest work was laid with imported lime. Farther out in Pennsylvania, a common mud clay was used as the binding material. The chimneys of these houses were built of brick

house in Hackensack, which shows the front wall and part of the west wall of stone stuccoed and the rest of frame clapboarded. In some rare instances, the wall consists of a hewn-timber frame work filled in with stone or brick and the whole plastered over. The chimneys are of Holland brick.



The old Wyck house, at Germantown.

Courtesy Atlas Cement Co.

imported from England. The brick was seldom stuccoed but we frequently find it whitewashed.

Out through New Jersey the walls, as a general thing, were built of native sandstone on the ground story and wood above," says J. A. F. Cardiff, A. I. A., in Early Stucco Houses, from which we quote. "In New York and Staten Island both stone and wood were used, while on Long Island wood was invariably employed. The combination of these materials is sometimes rather curious, as for instance, the charming old Vanderbeek

Around New York and Staten Island the stone, which was hard, was laid up random-rubble fashion, sometimes stuccoed, more frequently whitewashed." "The mortar used for setting the stone, which was an ordinary clay mud mixture containing an admixture of straw as a binder, could not withstand the washing action of the rain, and it was evidently due to this fault that a protective coating of stucco was sometimes applied. There seems no other reason for its use, since the stone work itself, in color, texture and handling is charming.

In the light of our knowledge of the perishable nature of old fashioned lime mortar where used out of doors, it may seem curious to contemplate its use as a protective covering for exterior masonry, but protection was necessary and no more-lasting material was then available."

Many varieties of stucco were used, but there were three distinctive types more generally used. One was a stucco of lime and gritty sand, troweled quite smooth and even. In tone it is a warm gray with an interesting mottled and sparkling effect due to the presence of mica in the sand. This type was used on the charming old Wyck house, the finest in all Germantown, but it lies far beneath whitewash so thick that the lattice is partly imbedded.

Another interesting variety is a warmer gray stucco made of the same or somewhat coarser constituents, but with a texture such as might be termed roughly-floated. The surface has a pleasing inequality, following the unevenness of the stone base and in some cases the high spots of the stone come through the stucco. This finish was used a great deal

on the gable walls, with a different finish on the front walls.

The stucco of the old Dutch home-steads was made of a fine sand and lime mortar. Records of one, Adrian Sip, who in 1665 built an interesting old house still standing, describes the stucco as made of a lime produced by burning oyster shells.

In texture this stucco is finer than that on the Germantown houses and the subsequent coatings of whitewash, which seem to have been the rule, have made it quite smooth. The mellow tones of the old whitewash is very lovely. A more charming example of old stucco than the Vanderbeek house could hardly be found. The wide projection of the eaves across the whole front of the house, serving almost the purpose of a porch, in the protection it gives the entrance, was sometimes used in this early type of Dutch house, though this is perhaps its most interesting example. This shelf-like effect in the overhang of the eaves stuccoed underneath is also seen in some of the early Pennsylvania types, lending a charm quite its own, to the stucco surface which it protects.

## Pre-Cast Walls for the Concrete House

AVING concrete in a horizontal plane is a very simple matter. Reinforcement is easily put in place, openings only require the placing of the frames, the thickness of the wall is easily established, the concrete is easily poured.

Early in the history of concrete construction in this country, Col. Aiken of the United States Army, devised a system of casting the walls of a building in a horizontal position and raising them with special equipment. Numerous buildings

were erected, notably at army posts, but the system was not widely used. Concrete enthusiasts have taken up this system in various parts of the country, but the most satisfactory of the recent developments of this system have been carried on in Southern California under the personal direction of the architect Mr. Irving J. Gill, who has developed the use of concrete in residence construction and who uses it almost or quite exclusively in his work. In order to obtain the desired excellence of results the materials are pre-

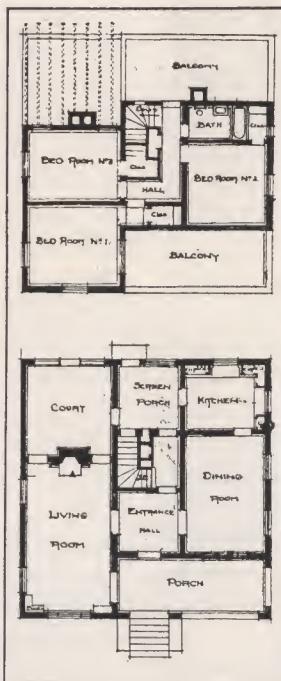
pared with the greatest care and the workmen have especial training. The training of a workman looks not so much toward a superficial perfection of technique as toward the development of personal thought and consciousness toward his work. With this basis for the materials and the labor, and the absolute sincerity in design, quite phenomenal results have been attained in the use of concrete by this artist-craftsman.

The sincerity of design, with this architect, goes back to first principles, both in its artistic and constructional phases. Nothing is done purely for effect. Neither effort nor material may be wasted. The simplest adequate solution of a problem is essentially the best solution. Taking concrete as the ultimate logical building material for the conditions in which he

works, the pre-cast wall is a logical method for its construction.

The photographs show a concrete house built by Mr. Gill at Hollywood in the different stages of its erection, and somewhat the processes of construction. A view looking out from the loggia shows the simplicity and beauty of the arch treatment, which is characteristic of the design.

After the foundation for the house had been poured and had set the floor slab was laid, and on this jacks for the erection of the walls were placed. Twelve feet of floor space from the wall to be erected was required, in which to place the jacks, on which tilting tables, built of 2-in. x 6-in. rough plank, were laid over steel walking beams. The number of jacks used and the spacing of them depended on the weight and size of



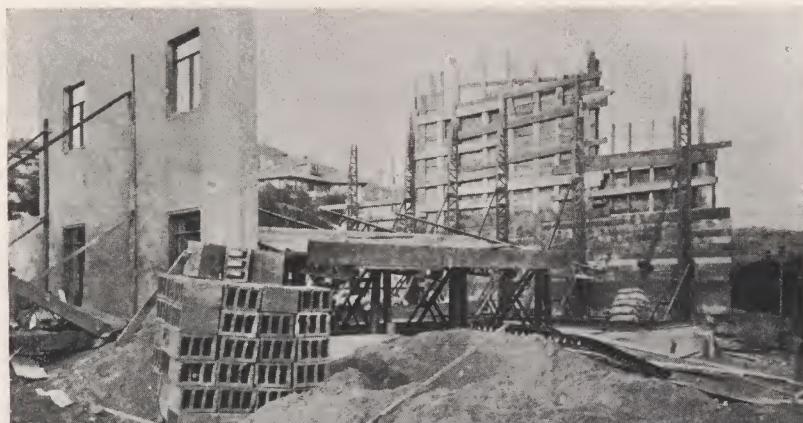
The beauty of a simple treatment of the arch.

*Irving J. Gill, Architect.*

Upper cut shows 3 wall sections in different stages of construction;—with forms removed, wall in place showing jacks, and forms ready for concrete.

Second cut shows wall sections ready to be raised.

The jacks are shown below.



the wall which is to be supported.

Door and window openings were laid out, the metal jambs set in place and the remaining surface of the wall form covered with hollow tile spaced for reinforced concrete beams to give proper stiffness; twisted steel rods were then placed vertically and horizontally and the wall was ready to be poured. Concrete was wheeled up an incline, dumped, leveled off and allowed to set. The upper surface (the outside of the wall) was finished in its tilted position before being raised.

The power for erection was obtained from a 5-horse power gasoline engine and transmitted to the jacks by a shaft through their pedestals. A worm gear mechanism extended all jacks at exactly the same rate.



From one-half hour to two and a half hours was required to raise each wall, the time depending on the weight, shape and position of the wall.



The interior has no unnecessary wood work to keep clean.

*Irving J. Gill, Architect.*

Horizontal rods left projecting from the ends of the walls were bound together after two adjacent walls had been raised to an upright position. A form two feet wide was built up the entire height of the wall and into this, concrete was poured, producing a concrete and hollow tile shell reinforced with twisted steel bars.

Roof joists are held in place by anchors for which provision had been made in the concrete wall and 1-inch x 6-inch sheathing covered by a gravel composition was used for the roofing. Interior partitions are of metal lath on wood studding and the rough concrete floor slab has been covered by a finish coat reinforced with wire cloth.

Special metal door and window frames were used, manufactured from No. 22 gauge galvanized iron, bent to shape and provided with perforated flanges through which the concrete forms a key. The plastering finishes flush to the corners of the frames which act as a corner bead for both ex-

terior and interior wall surfaces. Each side of the frame is bent from one piece of metal so there is no danger from cracks. The interior of the house has been worked out with quite as much thought and in quite as original a way as the exterior. Sanitation and the "Conservation of Mother" have been kept among the first considerations in the planning of the interior. The view from the loggia shows the restfulness of the simple treatment. There are no mouldings or panels anywhere, for these will catch dust and add to the cares of the housewife. Neither is there any unnecessary woodwork to wash and keep clean. Picture mouldings are also omitted, the individual pictures being hung invisibly. The doors are without panels or mouldings—simply plain slab surfaces easily cleaned and dusted, while the absence of baseboards, ceiling beams, plate rails, door and window casings make the house as near dust-proof as possible.



Exterior of the house at Hollywood where the walls were pre-cast.

*Irving J. Gill, Architect.*

**The Kitchen is the Laboratory about which the Home Centers  
The Home is the Carbureter of the Industrial World**

## Efficiency in the Home

Edith M. Jones, Kitchen Specialist

### PART III.



HE photographs with this series of articles show a modern workshop of the efficient type. It is interesting because it is simple and without unusual expense.

The plan of the kitchen is given in detail in order to show how the work of the house is laid out and the relation of one part to another. The range is placed on the long wall with the pot closet near. The sink and work tables are placed with reference to the light. The cupboards and drawers are placed convenient to their use,—salt and spice cupboard near the range; dish cupboards near the sink; bins and baking utensils near the work table, etcetera.

The photograph shows the sink and the cupboards around and above the door above and below the vitrolite working shelf. The photos of the series show the cupboards and their uses quite definitely.

The overhead cupboards all around the



Platter cupboard is open—Bread, Cake and Cookie boxes are partially open.

kitchen are useful for two reasons. They take care of the things which are not in constant use and which otherwise would have to be carried to the attic to be stored—such as Christmas decorations, bits of china, etc., etc. Then, too, these high cupboards fill the space from dish cupboard to ceiling and there is no ledge for dust and dirt to lodge which is always a source of much annoyance to the good housekeeper.

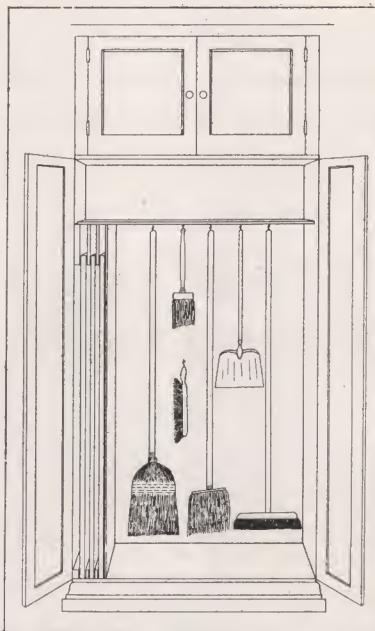
The open door shows the platter closet, deep enough for large dishes.

The partially open compartments are the bread, cake, and cookie boxes. These boxes are made of this same heavy "vat" tin and run in like drawers. This arrangement economizes the working table tops.

The platter closet has two rows of nickled uprights placed one row at the back and one row at front of cupboard and set two inches apart. These can be removed for cleaning.

The other drawers are for the various cooking utensils.

The tall narrow closet at the left of the door is the broom closet, a drawing of which shows the uses to which it is put. This drawing shows the table boards run in between uprights at left of the closet. The hooks for brooms, etc., are on the underside of the shelf and



Inside the cupboard at the left of the door.

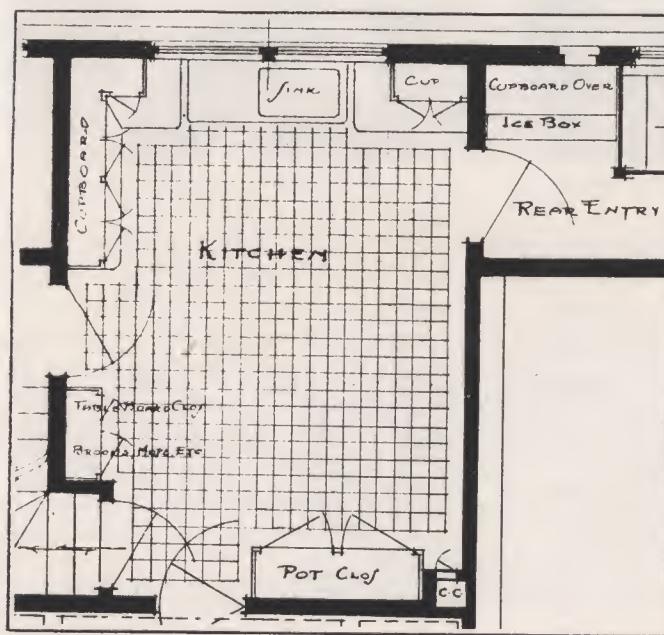
the shelf affords a place for dusters, polish bath, etc. This closet, as well as the pan closet, is lined with galvanized iron.

The knobs and pulls on the cupboards and drawers are good looking, very practical and easily cleaned, because they are made of porcelain and nickel.

The kitchen floor is always a problem. In this case one of the new elastic, cork composition tile has been used. The floor is made up of four inch tile of a beautiful Copenhagen blue with interlining strips

of black. There is a border of the plain blue which curves and forms the sanitary base on which rests the cupboards. This sanitary base is a great protection for the white enamel paint of the cupboards.

The size of this kitchen is 12' by 14' with a good sized anteroom for the refrigerator; this box is iced from the outside. In this anteroom is also a receiving window with a broad shelf for incoming groceries, etc. This method of icing the refrigerator and this receiving window will not only keep much dirt out of the house, but confusion and interruption by untimely deliveries can be avoided. Above the refrigerator in this anteroom is a cupboard for the storage of extra supplies, baking pans, etc. Stairs at the left of the anteroom lead to the laundry and stairs at the right open into the garage, which is



heated by the house heating system.

There is no butler's pantry in this house because of the decided opposition of the housewife. She keeps a nurse maid for the children and one general girl for the house. There is always a generous sense of hospitality for all, but

formal entertaining is done at one of the town or country clubs. This effort of simplifying the housekeeping has a wonderful effect upon the servant problem in this home—it not alone lightens the work but eliminates much confusion and long working hours.

## Some Charming Stucco Homes

Katherine Keene



HERE is a group of architects in this country to whom all home lovers owe a debt of gratitude for the notable work they have done in bringing the element of beauty into American homes. They have done this

pass things without seeing them, which to other people are so attractive as to draw their especial attention. Only a comparatively short time ago a beautiful country home was so unusual that it immediately became a "show place" in the



Courtesy Atlas Cement Co.

A charming country home.

Davis, McGrath & Kiessling, Architects.

in such a simple logical way that even those most closely concerned have scarcely appreciated just what was happening. The thought of beauty is infectious. Those who see it want it. To be sure there are people who are "beauty blind" just as there are people who are color blind. They

community. But the infection spread. Those who could not have beautiful big places demanded at least a little spot of beauty, and the spots have accumulated and grown, until now there is scarcely a community which does not rejoice in them. At the same time the group of



Courtesy Sandusky Cement Co.

Picturesque in its roof lines.

*Robert D. Farquhar, Architect.*

architects doing the beautiful big houses has also enlarged amazingly, and the small house is receiving its share of atten-

tion, for it is not only the "big house" on the estate, but the superintendent's cottage and that of the tenant farmer must



Courtesy Atlas Cement Co.

The beauty of the simple stucco surface.

*Norman McGlackan, Architect.*



A Dutch Colonial Cottage.

Courtesy Atlas Cement Co.

all be given their element of beauty. Not only the big city house and the summer cottage of the bond holder, but whole

suburbs of small cottages have been made picturesque and attractive. For that matter the "bond holding class" has spread



A Superintendent's Cottage.

Courtesy Atlas Cement Co.

to the family with a very moderate income.

The series of charming homes presented in this group run the gamut in size from the beautiful country home to the superintendent's cottage, yet each has a beauty of its own.

The soft texture of the stucco is restful

and pleasing to the eye. It takes tones which are almost iridescent in the sunlight, and it catches the play of light and shadow in a fascinating way. Yet we have been told that the possibilities of stucco have scarcely been touched as yet, that it has been used in only the simplest and in so many cases in the crudest way.

## The Swing of the Pendulum

### Modern Building With an Ancient Material



R. Bernard Shaw somewhere says, in his brilliant fashion, that human progress is of the squirrel-cage movement. We are traveling pretty fast but we're getting nowhere. Mr. Shaw's idea is that we mistake speed



A substantial and pleasing stucco home.

for straight-away getting there. Thus history moves in spirals, and not full-speed ahead. Traveling in a circle fetches the traveler up at the starting-point. Humanity "comes back"—comes back to taste old emotions made new because forgotten; to reapply to new days old ways and means and methods.

Taking counsel, therefore, of this wisdom of the ages, the men of our sophisticated Today are going back to Yesterday, and the Day before that, for inspiration in the building of homes. Have we

ever really, for that matter, gotten away from the fundamental principles and methods of construction which made for endurance in the buildings of the past.

Modern research, in its excavations among the most ancient buildings, comes upon many things which we think of as being very modern. The Romans made a large use of concrete in the building of their day. Cement is found among the ruins which are very old. It was used by the ancient Babylonians, that most



A modern residence.

"modern" of ancient peoples, by the Egyptians, and Greeks. All through southern Europe stucco is in common use today, presumably dating back to the earliest time. Its qualities, both as to charm and endurance, have been well tested.

The clock has struck again and the swing of the pendulum has brought us back to the new use of an old material, which we are considering from the viewpoint of homes for folks to live in at this present time.

When you are to build a home for yourself you will be interested, first, in the material out of which to build it. You will take into consideration such things as durability, cost of material, cost of



A charming home.

maintenance and resistance to fire. Back of that in your head will be detail considerations, such as repairs, fire insurance, cost of heating. But looming large, naturally, also, will be the matter of first cost.

Take the item of durability, or perma-



Taking advantage of the plastic material.

nency, of construction. There is nothing better than good stucco. One doesn't have to "prove" that. It has been proven by the wisdom which has come down to us through the ages. But the stucco must be right, the composition must be right; and it must be applied upon



A charming use of stucco.

a proper base. If your stucco is properly mixed and properly applied, it will last so long as your building will last. Nay! It may even lengthen the life of your building. Your stucco-covered walls, with backing scientifically constructed and of dependable materials, will win out in the fight with time and the elements.

You will consider, moreover, the matter of adaptability to change in weather conditions in that house you contemplate building. The construction beneath the



Rough cast stucco used in a building for a large seed company

stucco is all-important. A suitable backing will eliminate all chance of cracking and disturbing the stucco. That will mean, of course, weather-proof construction.

Stucco is naturally cool in summer and warm in winter. So that, whether you live North or South or East or West (and, by the way, "hame's best"), you will have a house perfectly adapted to climatic conditions.

But you're not through when the house is built. Maintenance, or upkeep charges will bulk large in your home-making plans.

You must count on painting a house surfaced with wood every three or four years, at a cost of anywhere from seventy-five to two hundred dollars.

In your stucco house, however, you must remember that the longer good stucco ages, the more potentially lasting it becomes. There is nothing to wear out, nothing on the outside to be refur-

nished, and your stucco house is bound to be a home-beautiful if you give it a chance. It will lend itself easily, and naturally, to the surrounding landscape; and its soft-toned surface, with trellises and vines, will age and mellow most delightfully with the passing of the years.

Building, thus, upon the wisdom from the ages, you will be old-fashioned, yet up-to-date. For you will have gone back to construction principles and construction materials as practiced and used by those of the race who lived and loved in the Long Ago. Yet you will be doing what everybody else is doing—you will be in the swim—you will have a home *comme il faut*.

Meantime, Mr. Bernard Shaw is right. History moves in circles, moves in a spiral, and not in a straight line. Evolution, after all, is revolution. The swing of the pendulum—now back, then forward—is the measure of the story of humanity.

The illustrations in the foregoing article are used by courtesy of the Bishopric Manufacturing Company.

## A Simple Substantial Home for the Smallest Possible Expenditure



THE most interesting result obtained in the Complete Building Show competition in New York asking for the designs of small houses recently completed is shown in the accompanying photographs and in plan and was awarded the first prize. The competition fulfilled its object in bringing some very interesting homes

### Detailed Statement of Costs.

Excavating .....	\$ 85.00
Masonry Work .....	2,000.00
Carpentry work, inc.	
unfinished work....	2,100.00
Roofing .....	100.00
Painting .....	30.00
Plastering .....	155.00
Plumbing .....	300.00
Heating .....	200.00
Tinning .....	75.00
Wiring .....	75.00
Electric fixtures .....	35.00
Hardware .....	80.00
 Total .....	 \$5,235.00

built at a very reasonable price. It must not be overlooked that these homes all received, in all probability, the greatest thought and co-operation of the home owner, the architect, and the builder. Equal results cannot be expected from the ordinary contractor-built house. It is the individual effort which has made these homes pos-

sible; taking advantage of local materials or conditions, and making the most of them.

The first prize was awarded to the house designed by Robert Tappan, at that time associated with Cram and Ferguson, architects, and built at Bryn Athyn, Pennsylvania.

The house represents an earnest attempt on the part of the owner and the architect to construct a simple, substantial home for the smallest possible expenditure. In order to accomplish this several features that are often considered necessary in even the cheapest houses were omitted, such as a vestibule, coat closet, serving pantry and cov-



Exposed girders form the second floor construction.

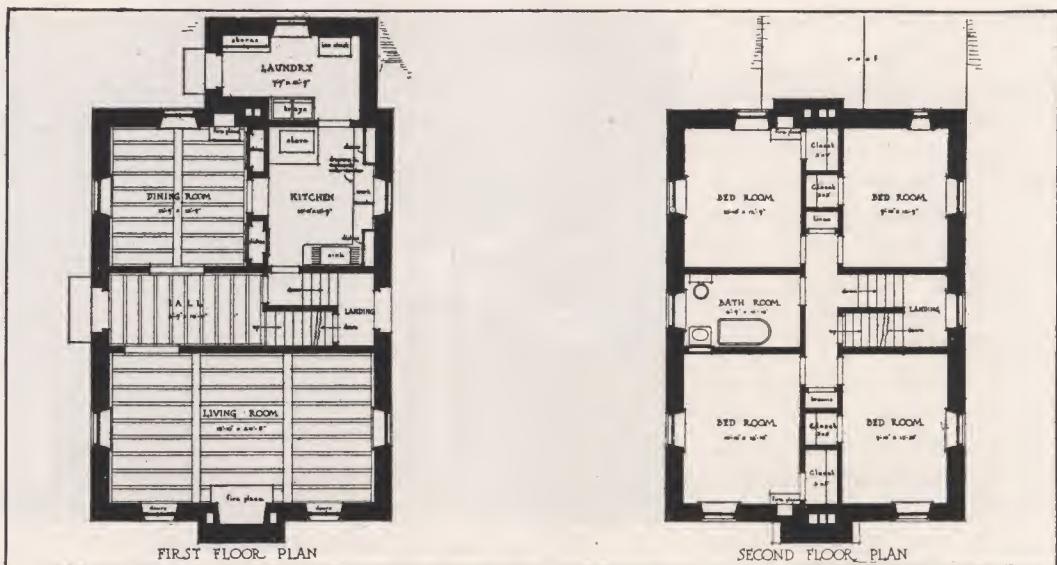
ered piazza, or a screened sun room.

Stone was chosen for the walls of the house because it happened to be cheap in the locality. The construction of the



Stone was chosen for the walls because it happened to be cheap in the locality.

*Robert Tappan, Architect.*



second floor was of exposed girders and joists without a cent's extra expense over the usual way. There is very little wood trim inside the house. All of the windows are set in plaster jambs and a wood

plank serves as a window sill. The window frames are of the simplest construction; the same in design as those ordinarily used for cellar windows. They have proved to be amply weather-tight. The floors are of North Carolina pine throughout. The plaster walls are slightly rough and tinted in various colors for the different rooms. The kitchen arrangements were laid out with the idea that the owner's wife would do her own housekeeping. The house has been standing for over a year, and the owner is very well satisfied with his experiment in simple building. Unfortunately the Colonial front doorway, which was designed, was not in place at the time the pictures were taken. Carpentry work is the owner's hobby and he intends to make this doorway himself from the designs when he can get around to it.

The architect says: "It may be interesting to know, in connection with this small house, that it is directly opposite a magnificent Swedenborgian cathedral that we are building in the village. This cathedral has been under construction for four years and will not be completed for another year and a half. It is probably



*Robert Tappan, Architect.*  
The dining room is quaint.

the most expensive church of its size that has been built in this country. The money is not expended in superfluous elaboration, however; it has all gone toward creating an edifice by hand labor throughout, and one of the sincerest possible construction. The village of Bryn Athyn is a religious community founded

by the late John Pitcairn. The church is his gift to the village. It has been a source of considerable satisfaction that the owner and I have been able to create a substantial cottage at the least possible cost directly opposite a church of very great cost, and still have it hold its own architecturally."

## Stucco for the Home Beautiful

**T**HE influence of the Spanish *Padres* is still widely felt along the Pacific coast and particularly in the Southwest which was the special field of their labors, though that influence extends in a widely different direction

The Spanish and Mexican builders, who did the early mission building, knew the value of the plastic substance which they found in the fields in which they built. Building with adobe in the most primitive way for the early buildings which were



The white walls are accentuated by red Spanish tile.

E. W. Stillwell, Architect

from that in which those kindly fathers anticipated lasting results. The thing of which they thought least and which they did as a matter of course,—the building of their simple structures,—has been a source of inspiration to the civilization which followed them. They worked sincerely and without conscious effort, and they achieved results which set their small world to copying them.

charming in their simplicity, the use of stucco naturally followed.

California has much to teach the home-builder in the older parts of the country, on account of the progressive spirit of the building public in that newly built region. While some of the features are of local interest, many could be widely applied, and in fact are being used all over the country.

A home on one of the beautiful Los Angeles boulevards is here illustrated. It is built of cement applied over metal lath, the white walls being accentuated by the red Spanish tile of the roofs.

The plan follows in a way the simple lines of the Mission time, with its semi-enclosed patio, but with the added com-

found to be a real convenience. The pantry opening directly from the dining room is quite large enough for a house of this size. The cold-air closet is indispensable to the Californian and might be used to advantage elsewhere. The work table, like the sink in the kitchen, is placed under the window for the best light. There is ample cupboard room, and the built-in ironing board is well located.

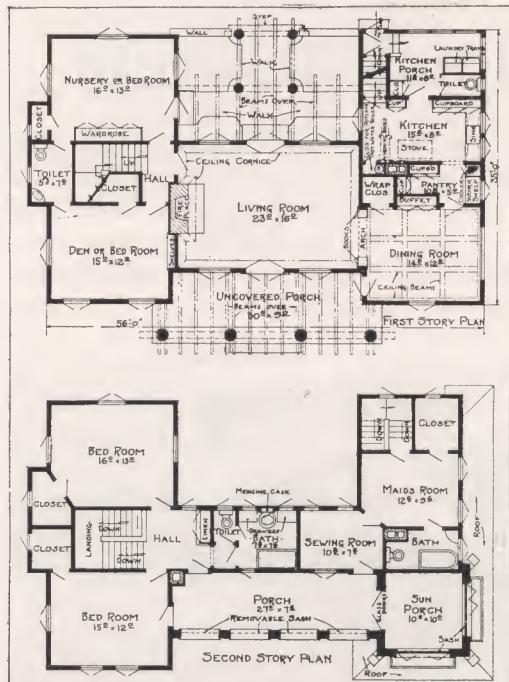
Laundry trays, toilet and broom closet on the kitchen porch all add to the step-saving system, and this is further aided by the direct access to cellar and service yard through the grade entrance. The ascending rear stairs fit nicely into the cellar-stair recess.

The suite of rooms at the other end of the living room can easily be used as bedrooms or as a den and a nursery. Both are well supplied with closets and have direct connection with toilet, again saving steps. If a den is desired, a door to the living room and one to the porch would add to convenience and comfort.

The second floor is divided in an unusual way. The bedrooms for the family are of good size, closely connecting to stairs and bath. The servants' room is isolated so that they need not come in contact with the household in their comings and goings. This room is one that will help to solve the servant question, having a private bath and generous closet. A sewing room in the home is almost a necessity nowadays.

Special attention is called to the porch and sun room. Either can be used for sitting or sleeping room. Built on the East, the porch openings are fitted with removable sash, making it usable the whole year around, while the sun porch casements are adjusted by special hardware permitting them to be folded back against one side of the opening.

All windows are casements opening out, and are fitted with roller screens,



forts and beauty of built-in equipment found in every California home of its type.

The living room, opening from the front porch and onto the patio, is light and airy, the fireplace at one end and the bookcases at the other, giving a "homey" touch. The "patio" at the rear carries out the true Spanish idea of seclusion for the assembled family. The pergola will soon be covered with flowering vines, and the sense of comfort and peace coming to one resting there, can hardly be found on the ordinary porch.

The dining room has a beautiful buffet, close to the pantry door, which saves many steps. The wrap closet is near enough to the entrance that it will be

thus eliminating trouble in opening or closing the windows and removing the unpleasant effect given by a screen in front of the glass when the window is closed.

Basement for the heating plant, etc.,

occupies the space under the right wing of the house.

The house is frame with stucco on metal lath although hollow tile or brick with stucco applied could be used, giving a thicker wall at a slightly higher cost.

## A Stucco House Built in Minnesota

 OT only in "Sunny California" is stucco popular: It is also being used very widely throughout the region of sterner climates and the stucco house is equally popular throughout Minnesota and the Dakotas.

The home here shown has recently been completed in Minneapolis. It will be noticed that it is very compactly planned and has a vestibule which may be left open in summer but in winter puts two doors between the temperature of the outside and that of the house. The sun room, a charming interior view of which is shown, may be thrown open to catch every breeze on a summer day, and to

get sunshine all day during the winter.

By a clever arrangement of the porch the entrance is carried back to the central hall, thus giving direct access to the stairs, the living room or the dining room. The toilet under the second run of the stairs gives a very convenient arrangement.

When so desired the living room, dining room and hall can be thrown well together, with the wide openings and folding doors between them. The living room has windows on three sides and one end of the room is dominated by the fireplace, with high casement windows above the mantel shelf at either side.



A home with a pleasure sense of dignity.

W. W. Purdy, Architect.



Beyond is a delightful sun room.

One side of the dining room is very attractive with its built-in buffet, and serving table under the wide window. The cupboard doors on either side are filled with glass, leaded or cut to match the windows. A group of windows fills the side of the room opposite the hall.

The kitchen is very complete. It has a built-in work table with bins under, a plate warmer over the radiator, a high cupboard over the refrigerator and a cupboard for table leaves beside it. Steps from the kitchen give access to the land-

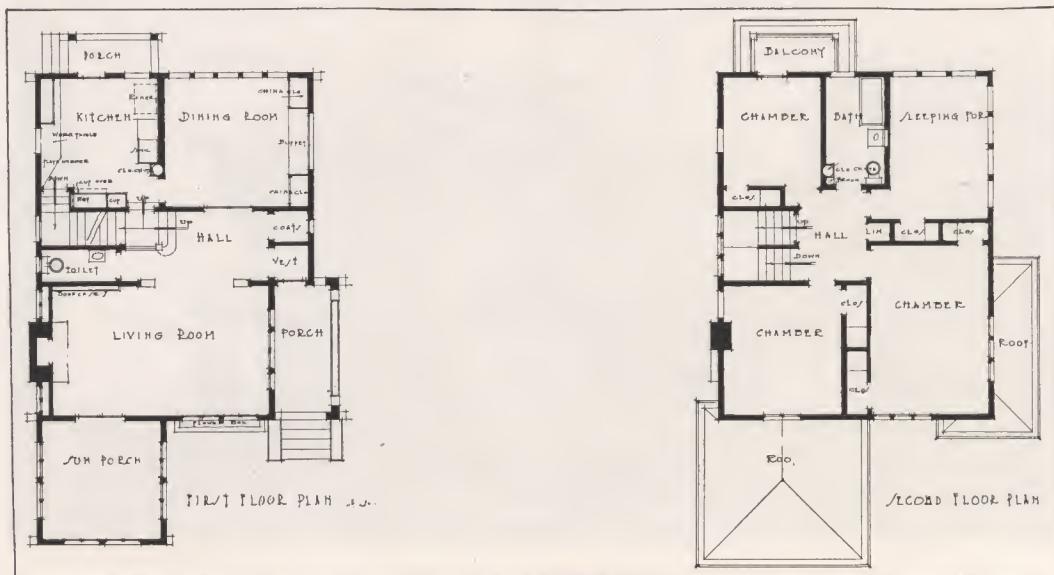
ing of the main stairs. The basement stairs also open from the kitchen and go down under the main stairs.

On the second floor are three airy chambers and a fourth with the outside walls filled with windows converting it into a sleeping porch when desired. There is a small balcony for airing bedding or rugs. Each chamber has at least one, and the largest room is provided with two closets. Over the main stairs is found the stairs to the

attic, with a door leading from the hall.

The second floor is finished in pine, painted in ivory enamel, with birch doors given a mahogany stain, or painted in dainty tones to correspond with the color scheme of the rooms.

The exterior walls are frame with white cement plaster over galvanized metal lath. On account of the simple lines of the house hollow tile might be substituted at a small additional cost. The roof shingles are stained a deep red. Porch floor and steps are of brick.



# Stucco for the Elaborate Home or for the Bungalow



E R Y unassuming and homey is the bungalow shown in this illustration. Stucco outside with the trim stained a darker tone, with its planting and vines and flower boxes, it is certainly an attractive little home.

The compactness of the plan gives the complete living space, —a five-room house in 28 by 31 feet. Each bedroom has a good sized closet, and there is a very convenient cupboard from the living room. The space under the roof may be finished for a big play room.

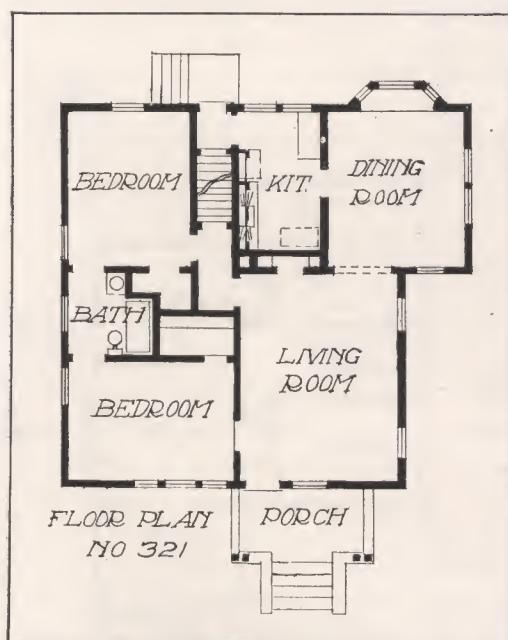


A homey, unassuming bungalow. J. W. Lindstrom, Architect.

The living room and dining room are well proportioned. The bay of windows in the dining room makes an interesting vista from the entrance. The kitchen, while small is, perhaps, more convenient because it is small, and fewer steps can accomplish the desired results. There are cupboards over the sink, and the range is beside them.

A passageway separates the rear bedroom from the living room and the stairs to the attic open from this passageway. The front bedroom opens from the living room and the bathroom may be reached from either room.

Quite a large house by comparison is the second home shown. The great living room has the full sweep of the house, with the entrance at one end and the sun porch at the other. Opposite the entrance the stairs lead up from the end of the living room. At the other end of the room is the fireplace, while the sun room



opens on one side and the dining room on the other. The screened porch and side entrance is beside the fireplace. Both living room and dining room are beamed and a great bay of windows projects on one side of the dining room.

The kitchen is fully equipped with cupboards and working space. Steps from the kitchen reach the landing of the main stairs.

Beyond the main part of the house is the billiard room in a separate wing which is only one story in height. It connects with the side entrance.

The main story of the house is finished in birch with birch floors throughout. In the main rooms the woodwork is given a stain of dark brownish mahogany. The second floor is finished in white, with



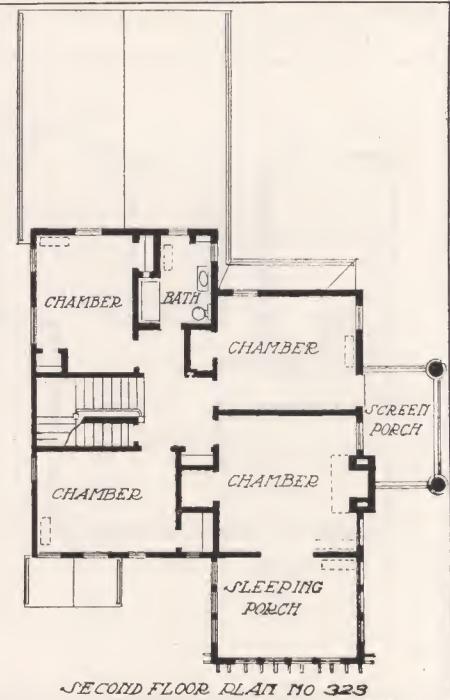
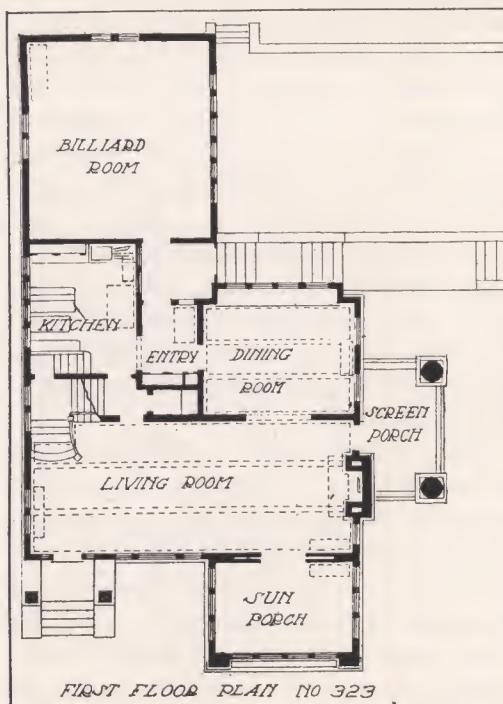
*J. W. Lindstrom, Architect.*

The Ionic order is used in the Colonial details.

enamel paint. The bathroom is tiled.

On the second floor are four chambers and a bath beside the sleeping porch. The small rear bedroom has two closets. The tub is set in a niche in the bathroom and tiled all around.

The exterior is of stucco with Colonial



details and with rafter ends, painted white, across the sun porch, over which vines are to be trained. The basement is built of brick to the sills of the first story windows.

The Ionic order is used in the Colonial details. Small free standing columns sup-

port a pediment at the main entrance. Pilasters carry the trellis over the sun porch, while great pillars two stories in height carry the cornice of the screened porch in line with the regular cornice of the house. Brackets are used in the soffit of the main cornices.

## A Complete Modern Cottage

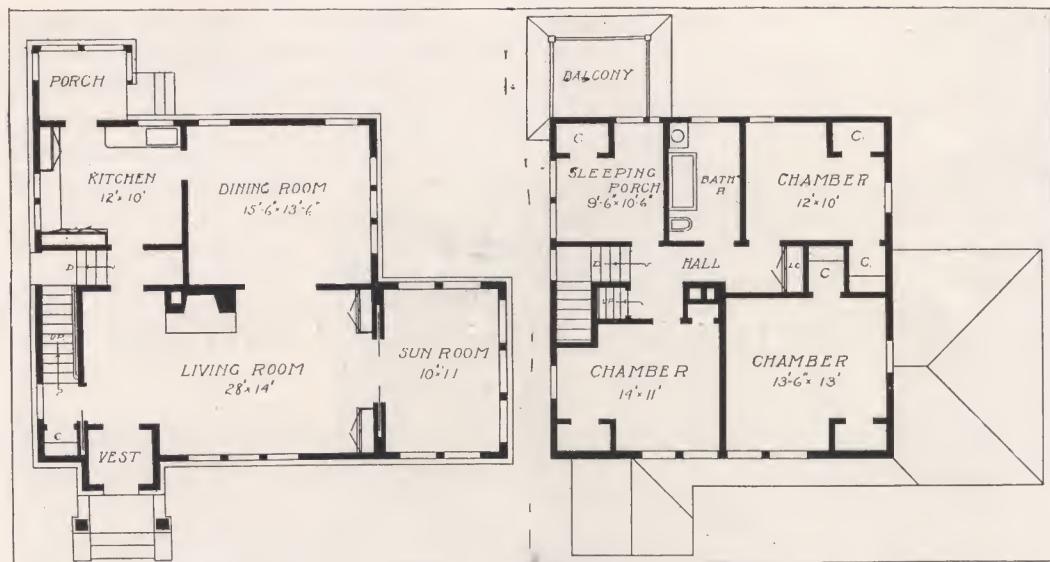


The stucco is given a pebble-dash finish.

C. S. Sedgwick, Architect.

**H**E home here shown is one that has been planned and is to be erected every soon. The exterior is finished with cement stucco on metal lath with a "pebble dash" finish. The size of the cottage is 30 feet x 30 feet with a sun room 11 feet wide, a front porch and one in the rear. The rooms are all of good size and they are conveniently arranged. Special attention has been given in the smaller details of the plan for the comfort of the housewife. The frontage is west and south. The inside finish is oak in the first story and white enamel for the second story with hardwood floors. The kitchen floor is covered with linoleum. There is a full basement with laundry fully equipped,

toilet room, heating and fuel rooms and vegetable cellar. The height of the first story is 9 feet and the second 8 feet 6 inches, with a good attic for storage purposes. The outside wood trimmings, cornices, casings, etc., are done in "Old Colonial White," and the roof is stained green. On the second floor are three good chambers, each with a good closet and in addition there are low closets under each roof angle. The ceilings are full height with square angles. The small chamber over the kitchen is used for a sleeping porch, with the space in the two sides filled with windows. There is one central chimney with wide fireplace in the living room and a large flue for furnace and kitchen. The main stairs are closed



off with a sliding door which closes the entry, and this is filled with glass. When required this can be kept closed and thus cut off the down flow of cold air. There

is a grade entrance under the main stairs with basement stairs underneath and attic stairs over. The bathroom is large and a good linen closet is provided.

## Combination in Building Materials

**P**ICTURESQUE effects are often obtained by bringing together different materials in the structure. Nothing lends itself more satisfactorily to the combination with other materials than cement or stucco. It is wonderfully effective in combination with brick, it is charming with shingles. A group of homes illustrated in this article shows several where stucco is used in combination with other materials and one in which stucco alone is interestingly treated.

The first is a cottage where the bed rooms on the second floor are finished under the broad sweep of the roof, with windows in the gables and a dormer, front and rear.

It is a small house, very compactly arranged, with a porch across the width of the front. The entrance is into the living

room, with the dining room beside it, and with only a slight separation between the two rooms. The fireplace, at one end of the living room, gives warmth and cheer to both rooms.

A tiny hall, which at the same time is large enough connects, yet separates the different parts of the house. A portiere across the hall would make a private suite of the bedroom and the bath. The hall connects both the sleeping rooms and the kitchen with the main living rooms, and also the stairs to the second floor.

The kitchen is carefully planned and well equipped with cupboard space. The refrigerator is on the rear porch beside the kitchen door. The basement stairs has an entrance at the grade level.

The house and the porch is built of stucco to the heads of the windows. Shingles are used in gables and dormers.

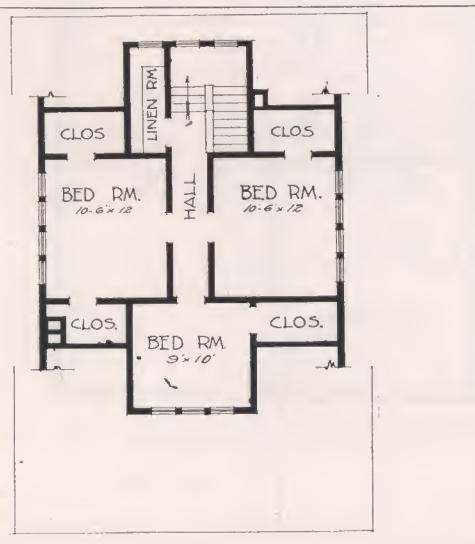
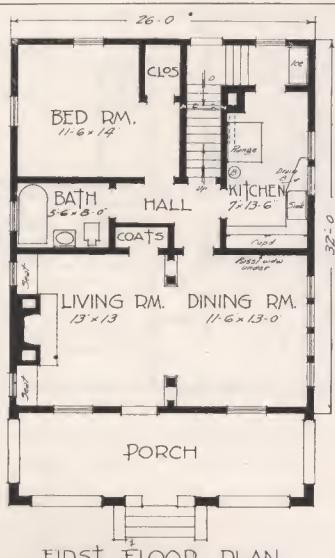


A cottage where rooms on the second floor come under the roof.

Judging from the outside, the size of a house is often very deceiving. Which house is larger, the first or the second of the designs shown? The figures give the second house as 25 by 28 feet. The living room is 13 by 15 feet, with a fire place at one end, where the chimney gives

a flue for the furnace and for the kitchen range. The entrance is into a good-sized reception hall, from which the stairs lead to the second floor.

A pass pantry connects the dining room with the kitchen, giving the cupboard space.



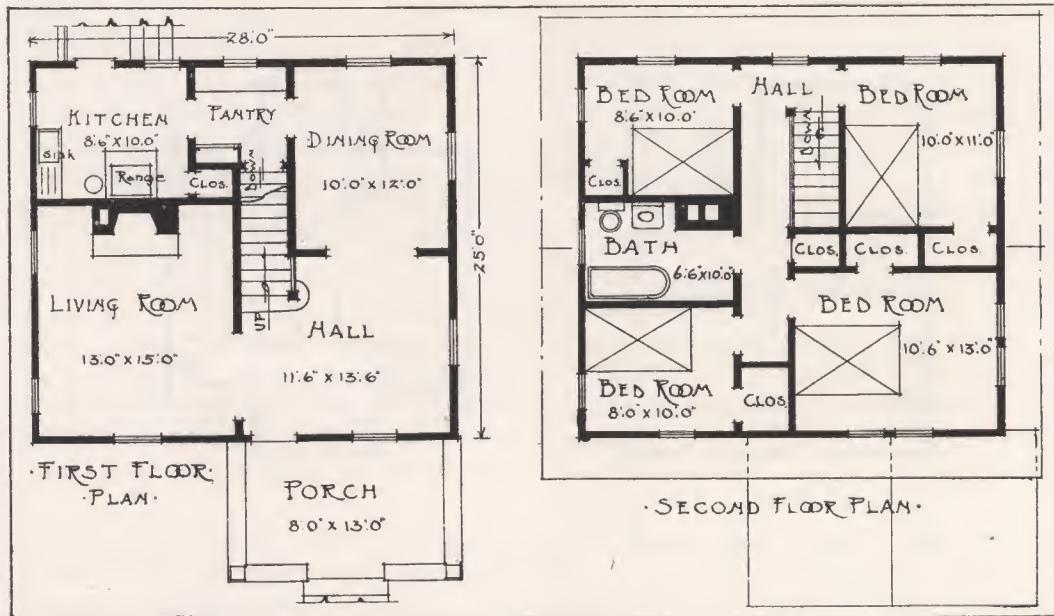


A compact house which is very attractive.

On the second floor are four sleeping rooms, which while they are small, each one has windows on two sides. The bath

room is centrally located, with a linen closet opposite.

The house is very good looking on the



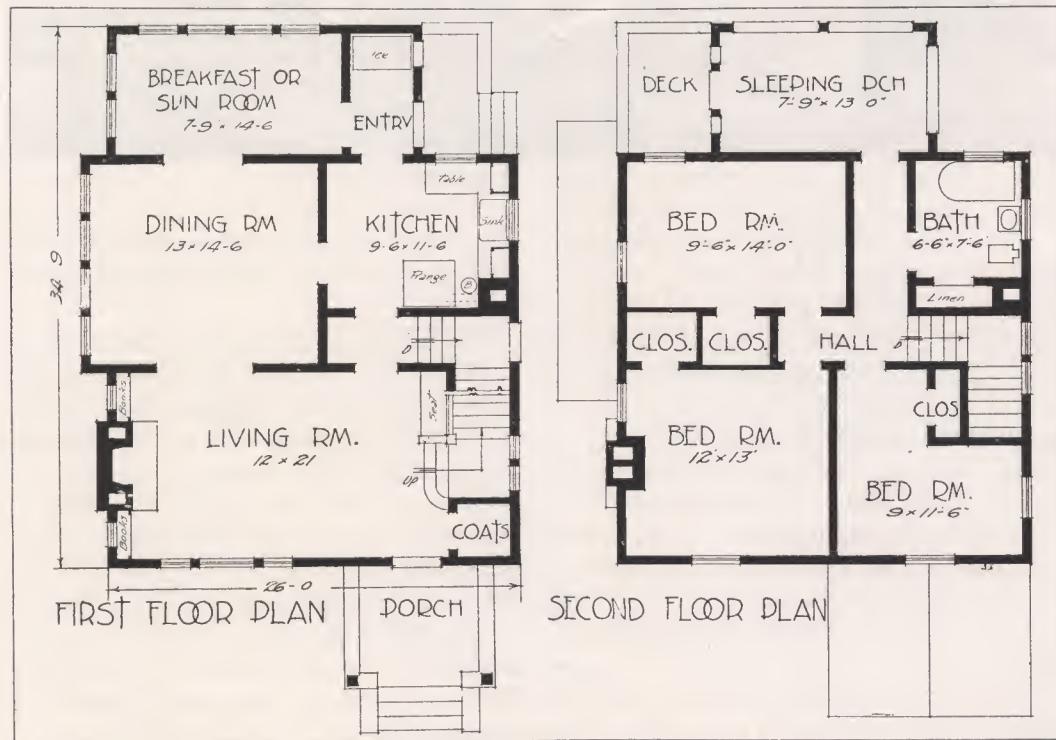


The stucco is carried to the sills of the second story windows,

outside with its combination of stucco quite light in tone and the dark stained shingles. The timber work and trim is

given the same dark stain as the shingles.

In the third house of the group the stucco is carried up to the sill course of



the second story windows, with a shingled frieze under the eaves and in the gables as well as for the dormers. All of these photographs are unfortunate in being taken when the homes are so new that the planting is scarcely more than started, so that they do not quite feel at home in their surroundings.

warmth to the dining as well as to the living room. A group of windows fills one side of the dining room, while the breakfast porch beyond makes a pleasing picture when the main dining room is used, or an informal meal may be served there. The breakfast porch connects directly with the kitchen through the en-



The house is very attractive in the simplicity of its lines.

This home is especially well planned with reference to the placing of the entrance and the co-ordination of the living rooms. The entrance is at one end of the living room, and beside the stairs. It also is conveniently near the door to the kitchen, which is separated from the living room by a passage way leading to the basement and to a grade entrance.

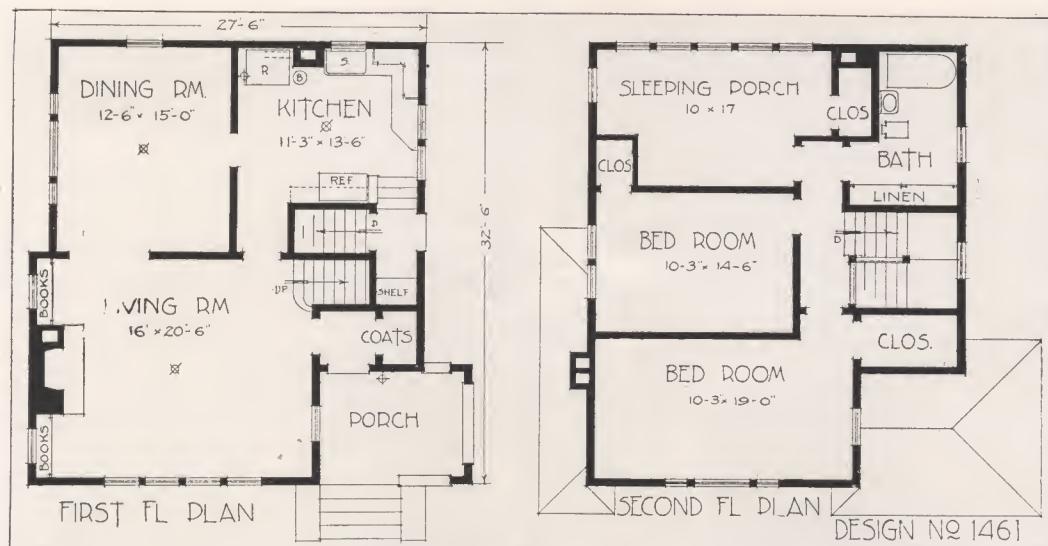
By this arrangement the living room has windows admitting air and light in three directions. The fireplace is in the end opposite the entrance, with windows on either side. The fireplace is near enough to the dining room that, with the wide opening between it gives cheer and

try. There is space in the entry for the refrigerator, which may be iced from the outside.

A cabinet is built around the window in the kitchen, with cupboards above and drawers and bins below, giving ample serving and working space. The sink is also placed under a window.

On the second floor are three bedrooms and a bath, all with ample closets, even the bathroom being so supplied. There is also a sleeping porch or den.

An open balcony or deck is reached from one of the bed rooms and is especially appreciated by the house keeper on cleaning days.



A basement under the house gives accommodation for the heating plant, laundry, fruit and storage rooms.

The last home in this group differs from the others in being built entirely of stucco and on very simple lines. The trellises are decorative in themselves, entirely aside from their usefulness as a framework for vines and growing things.

The general lines of the plan belong to the same type as that of the preceding home. The living room occupies the whole front of the house with the entrance through the porch at the side of the living room. There is easy access to the stairs at the entrance, and also to the kitchen,—a really important point, whether a maid answers the door or the mistress expects to answer it herself.

A fireplace with bookcases on either side fills one end of the living room. There are windows over the bookcases and a

fine group of windows across the front.

Beyond the living room is the dining room, and beside it the kitchen. The stairs to the basement are under the main stairs. A door at the grade level gives a side entrance to the kitchen. The refrigerator is placed beside the steps, allowing it to be easily iced.

On the second floor are three bedrooms and a bath room. One room is virtually a sleeping porch as one wall is filled with windows.

The heating plant and laundry are placed in the basement, with storage and fuel rooms.

This home is very attractive in the simplicity of its lines, both of wall and of roof. The white of the woodwork and the touch of color in the stain of the roofs are in pleasing contrast with the tone of the stucco, which is in itself rather light in tone.



Nelson & Van Wagenen, Architects.

Dining room of the Whipple house.



# Decoration and Finishing

VIRGINIA ROBIE, EDITOR

## Proportion in Decoration

**N**EVER has so much been said and written about house decoration as today. Magazines devote considerable space to the subject and the daily papers are full of hints and suggestions. The theme is a favorite one with lecturers, and the principles advocated are one and the same. Societies are formed to perpetuate Morris and Ruskin theories and the good work goes on unceasingly. Two lines of William Morris have been quoted so often that many people are unaware that he wrote anything else. Possibly if the sentence about the useful and the beautiful were quoted less and lived more, it would have more force and point. Owen Jones, who is seldom read and rarely quoted, said "Ornament construction, do not construct ornamentation"; and later and lesser lights have told us to build from the foundation, and to look after the useful and let the beautiful take care of itself.

Most people believe these principles, but few are successful in carrying them out. The majority of houses have good furniture, many have good wall-papers, rugs, and pictures. Yet there are few good interiors. If the really well-dressed people of one's acquaintance may be counted on one hand, is it not also true that the well-furnished houses may be enumerated in like manner? These satis-

factory houses stand apart from all the others. Why? They do not contain any better furniture, any better rugs, any better pictures, but they embody a few of the vital things. Proportion is one, simplicity of arrangement is another, harmony of color a third, the absence of the trivial a fourth. Possibly the fourth should be placed first, for its importance can hardly be over-emphasized. In the small things of the house the greatest faults are committed.

We all know that a few good things are better than a lot of poor things, but we have not yet learned that a *few* good things are better than a *lot* of good things. The crowding together of many articles, no matter how attractive each may be, is poor decoration. Unnecessary things are superfluous in the sense that they fail to contribute either to use or beauty. They are a hindrance to proportion, to order, and to harmony.

It is customary to think of proportion as belonging exclusively to the architecture of a house and having little relation with decoration. Proportion is the very foundation of good decoration. By proportion in decoration is meant the balance of light and shade, the contrast of plain and ornamental surfaces, and the correct adjustment of the large and important things in the room with the small

# INSIDE THE HOUSE

and unimportant. Proportion, simplicity, and harmony are the A B C of the decorative alphabet.

Under the head of vital things, order should be written in large capitals. No house is beautiful if its laws are disregarded. The order that faints at the

placing of a chair upsets the order of a room, something is wrong, and the "something" is the crowded condition.

We sympathize with one architect who designs his fireplaces without a sign of a shelf. Nothing can mar their beauty, for there is neither nook nor cranny in which to set a vase, nor any place where anything may be hung. They are as bare as Mother Hubbard's cupboard.

A room devoid of personal touches is not advocated. No matter how well the architect and the decorator have done their work, the real home feeling must be contributed by the occupants. Books and pictures and the various things which we know to be useful or believe to be beautiful have their place

sight of a speck of dust, the order that locates every chair and table by a chalk mark, the order that cannot tolerate a misplaced book, is not to be thus written. This order is not vital. It was once called good housekeeping, but it is no longer considered good home-making. It has wrecked homes quite as successfully as the saloon.

The order that makes for restfulness and for comfort is vital. It cannot exist in crowded rooms. Furniture is made to be used, and books are made to be read. If the disarranging of a table or the mis-

*Albro & Lindeberg, Architects.*



Simple Louis XVI treatment.

quite as much as the rug on the floor or the paper on the wall. The personal touch, the "human interest," is absolutely necessary. But it is contended that restraint is desirable in all things; in the arrangement of the parlor mantel as well as in the larger issues of life. Simplicity of arrangement is so bound up with order and the absence of the superfluous, that it cannot well be separated. A few pictures, chosen to accord with the room, books placed within reach of those who use them, lamps located where they are needed, flowers arranged with a Japanese

# INSIDE THE HOUSE!

feeling for the value of the leaf and stem, are expressions of a love for a simple arrangement. Beauty no less than comfort is dependent upon this vital principle.

Color is an important factor, and many inexpensive houses have been made "successful" by the intelligent use of this powerful factor. Harmonious coloring does not necessarily imply a room where everything matches. The blue rooms of twenty years ago, where walls, carpets, curtains, lambrequins, and upholstery were all of one shade, exist today only in fiction. They were never cheerful, imparting by some subtle power their own indigo coloring to the moods of the occupants. The blue room, pure and simple, is not now in

favor. But we are all familiar with the very green room. Green is nature's own color, and no other is so restful, so desirable; but it can be abused. Nature makes use of russets, of yellow-browns, of red-browns, of bronze shades, of grays, of all neutral tints, of soft purples, of pomegranate tones. These may be transferred to the walls of our houses, and if rightly placed be very effective.

Rooms brightly lighted are more satisfactory when the color schemes are comparatively low in tone, and dark rooms are made more livable by colors in a high-

er key. The length and breadth of a room are important considerations, likewise the height thereof. No room can be treated independently of its surroundings; many houses fail on this one point. Each room has been considered separately without regard to what opens off from it. Each



Where the highly decorative wall has been skillfully treated.

is charming in itself, but the effect as a whole is poor, and inability to cope with the problem of decoration has been shown.

A room is most satisfactory when it does not proclaim its color, when walls, rugs, furniture, pictures, and small articles make a satisfactory whole, and no one feature is unduly prominent. This principle does not preclude the use of brilliant tones. An Oriental rug on examination shows colors that gleam like jewels, yet the general effect is subdued.

Individuality has its place among the vital things, a quality difficult to define



in people, and even more so in houses. Mere oddity does not constitute individuality. Odd houses, like odd people, are merely eccentric. Individuality has been likened to the fragrance of a flower by Mr. Bragdon. There are no rules by which it may be attained, no methods by which it may be mastered, but no dwelling can express it in the remotest degree, unless the people who plan the rooms are themselves possessed of it. Houses reflect the personality of those who designed them, and they cannot express a non-existent quality.

Individual homes are not common. Many delightful, talented, even original people have little power to communicate a spark of the unusual to their surroundings. They do not possess the gift of endowing inanimate things with interest, of so grouping and combining very simple objects that they take on life and character. This is more than individuality. It comes very near genius.

Simplicity, order, proportion, harmony of colors, and individuality do not sum up all the vital things, but a home embodying these five principles cannot be a failure.

## Buying by Proxy

Keith's Guide on Home Decoration and Furnishing  
Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply. Write on one side of the paper only.

**T**HE use of the tile as an ornamental feature in house decoration is comparatively new in America, though centuries old in many foreign countries. Mantel tiles we have known for a long time, good and bad, but we are just awakening to the larger significance of the subject. Several of our leading potteries have helped us in this matter, and individual potters and craftsmen have contributed to our general education. Charming detached tiles may be purchased in many places and form one phase of the decorative side. Sometimes a single tree, possibly a pine, is depicted within its squareness. Again a bird on wing is the motif, or a single flower treated with the

simplicity of a block print, or a bit of historic ornament, a fragment of Moorish or Byzantine design. The tile tells a short story but usually tells it well. The color is an important part of its charm, and here is where it becomes a useful unit in house decoration. Placed on a shelf, hung against a wall, resting face upwards on a table or used in various ways it has decided value in a simple house. Nor is it always square. There are delightful things in circles particularly the replicas of Byzantine subjects, queer birds or leaf and flower motifs well worth the consideration of those who wish unusual things. A really beautiful tile will confer distinction on a small room and add interest to



# INSIDE THE HOUSE

the particular corner where it happens to be placed in a large room.

A visit to any of the large potteries would be a revelation to those who have thought of tiles merely as a fireplace accessory. Many of the tiles shown in the sales rooms were made primarily for hearths and mantels, but their great appeal is that they are entirely suitable for other purposes.

When the "Desert" and the "Jungle" tiles were first exhibited their purely decorative quality was enjoyed by nearly every one who saw them. Four sections, in each case, were needed to complete the composition. The majestic loneliness of the "Desert" and the luxuriant sweep of the "Jungle" struck a new note in tile making. It is fully a decade or more since these ceramic landscapes made their appearance at Grueby exhibitions, and since that time tile making has been a big feature of this pottery. From gigantic architectural commissions to the output of small table tiles for tea and hot-water pots is a long step with many intermediate developments.

Such compositions as the "Jungle" and the "Desert" may be used in many ways. Framed in simple strong bands of wood to match the trim of the room they are tremendously effective. Sometimes they are used as inserts in the woodwork, and in one dining-room of my acquaintance the "Jungle" has been sunk in the rough plaster of the wall and is the most important decoration. The use of tiles in the latter manner opens up a delightful field and one which is receiving consideration from decorators and architects all over the country.

The architectural side is concerned with both interior and exterior work and

is a subject by itself. This phase should not be overlooked by owners of simple houses, for there are many practical ways thus to use tiles. Several simple dwellings are recalled where tiling schemes have been carried out with marked effect. One house of rough cast has inserts of glazed green tiles over the small entrance; another has ivory colored tiles in bas-relief, combined with brick; and a third house, after the Spanish manner, has a mosaic of softly toned rough tiles for the entire second story. The rounded so-called Spanish roof tile is well known over here, and the flat red tile used shingle-wise also—the latter a picturesque and practical accessory for country houses. The tiled vestibule we have in many guises—tiled walls and floors and sometimes ceilings. The clever use of lettered tiling to denote the ownership of a house is sometimes seen, as, for instance, the inscription on one tiled floor of a small vestibule: "John and Elizabeth Wiloughby: Their House." Mottoes are occasionally used in vestibule and hall, but like fireplace inscriptions should be chosen with skill and discrimination. As with many other things, they are successful or very unsuccessful according to a happy or unhappy choice.

Electricity, in spite of its convenience, has not entirely superseded lamp and candle light. Science has not yet produced a flame that equals in charm the steady glow of the lamp or the soft gleam of the candle. Even when carefully shaded by stained and leaded glass, electricity still leaves something to be desired. It provides the useful and the practical, while candlelight supplies the poetical. Few houses are so constructed that candlelight alone is sufficient. Gas or elec-

# INSIDE THE HOUSE!

tricity must be depended upon as a rule to supply the general illumination, but wise is the home-maker and fortunate the family who knows the worth of candle-light and has the individuality to use it, not alone for entertainments, but every night. For reading and working, good lamps are a necessity. Candles do not encroach on their domain. They make no claim to special usefulness, but should they voice their virtues, they could put forth a special plea for a few attributes that the really useful things of life often lack. Lighted candles are beautiful in themselves, but this is not their greatest claim to consideration. It is the beauty they give to other objects that constitute their chief charm. They throw into

shadow the ugly portions of a room, they radiate certain beautiful points, they soften angles and lend a general witchery. No room is commonplace if lighted by candles. If firelight is the soul of a room, candlelight is the spirit. Both contribute a touch of ideality that atones for much that is commonplace and very prosaic in our twentieth-century homes.

Many people who use candles for the dinner-table ruin their beauty by elaborate shades. The simplicity of candlelight is one of its great attractions, and when the flame is hidden beneath ruffles of silk or tissue paper, the charm vanishes. Petticoat effects in candle-shades are not to be desired, and a word of protest might be raised against the omnipresent red shade. Red shades are sometimes effective, but they have been used to excess. Unshaded candles are most charming of all, but to many people there is something ecclesiastical about candles without shades. On the table shades are usually preferred, but there are many places where unshaded candles are more interesting. This matter is one of personal preference rather than of taste. A well-designed shade cannot give offense.

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FOR BETTER WALLS & CEILINGS



## A Room of their Own!

"Keep your hands off the piano—Take your feet out of that chair—Do sit down and read a book."

That's what the children hear from morning till night as soon as cold weather begins. There's no place to play. And healthy children are bubbling over with activity. They must play.

Give them a room of their own.

A place where they can make all the noise they want to. Where they can play to their hearts' content without danger to walls, floors or furniture.

Isn't there room in the attic or some other unused space where you can provide just the sort of a playroom the children need?

Beaver Board will furnish the walls and ceilings and make the coziest playroom you could imagine.

Beaver Board goes up so quickly and decorates so easily that the work will be done before you know it. When it's done, you'll envy the children, for they'll have the best room in the house.

In a word, Beaver Board is "manufactured lumber" built up from wood fibre into sturdy, substantial panels without a seam, knot or blemish. Weather and moisture proofed by patent Sealite sizing.

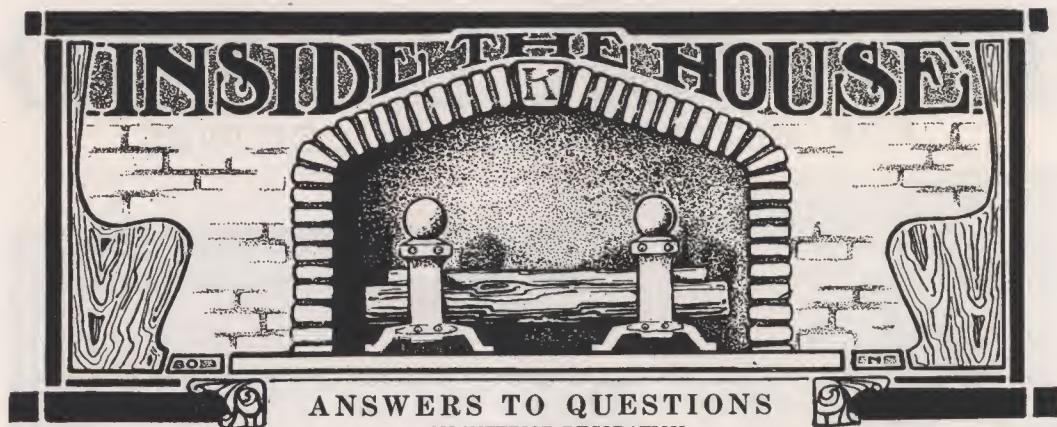
Send for booklet—"Beaver Board and Its Uses".

**THE BEAVER BOARD COMPANIES**  
149 Beaver Road, Buffalo, N.Y.  
Canada: 349 Wall Street, Beaverville, Ottawa  
England: 4 Southampton Row, London, W.C.  
Australia: Builders' Exchange, Sydney, N.S.W.  
United States Branches at Boston, New York,  
Baltimore, Cleveland, Detroit, Chicago,  
Minneapolis, Kansas City and San Francisco.  
*Manufacturers also of Beaver Greenboard, Beaver Blackboard and Beaverbilt Products. Distributors in principal cities, dealers everywhere.*



You can't expect Beaver Board results unless this trademark is on the back of the board you buy.





**ANSWERS TO QUESTIONS  
ON INTERIOR DECORATION.**

Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

**A Concrete House in Manilla.**

F. W. D.—We wish a scheme for interior decoration of a two-story dwelling of concrete. This might include painting house outside, if thought desirable. Such plans as I thought might be of use to you are enclosed. This should include tinting of walls, ceilings, and floor treatment, as well as style and design of furniture and number of pieces of latter. A  $3\frac{1}{2}$  inch concrete picture mold runs 2 feet 1 inch in the clear below ceiling, below stairs; above stairs it is 4 feet 6 inches from ceiling and 20 inches below top of partition walls.

Both floors are of concrete slab. A block of cement slab with grey marble chips is laid at entrance to each front door. The only woodwork is for doors and windows, door and window trim and cap rail and newell posts for stairs, which is native hardwood, polished natural finish, mostly "narra" (something like mahogany). Other darker woods are used to some extent, as panels for the doors, the stiles being all yellow "narra," a wood which finishes a light golden color. In all outside doors and French windows above stairs, the middle panel is to be set in wood frame with squares of art glass, in the upper panel native shell and lower panel of wood. Both shell and glass are set in diamond shape, and held in place by wood strips. It will be noted that native shell is used in windows instead of glass; these shells are white and translucent, about  $2\frac{1}{2}$  inches square, and are held in place by wood strips. They are set dia-

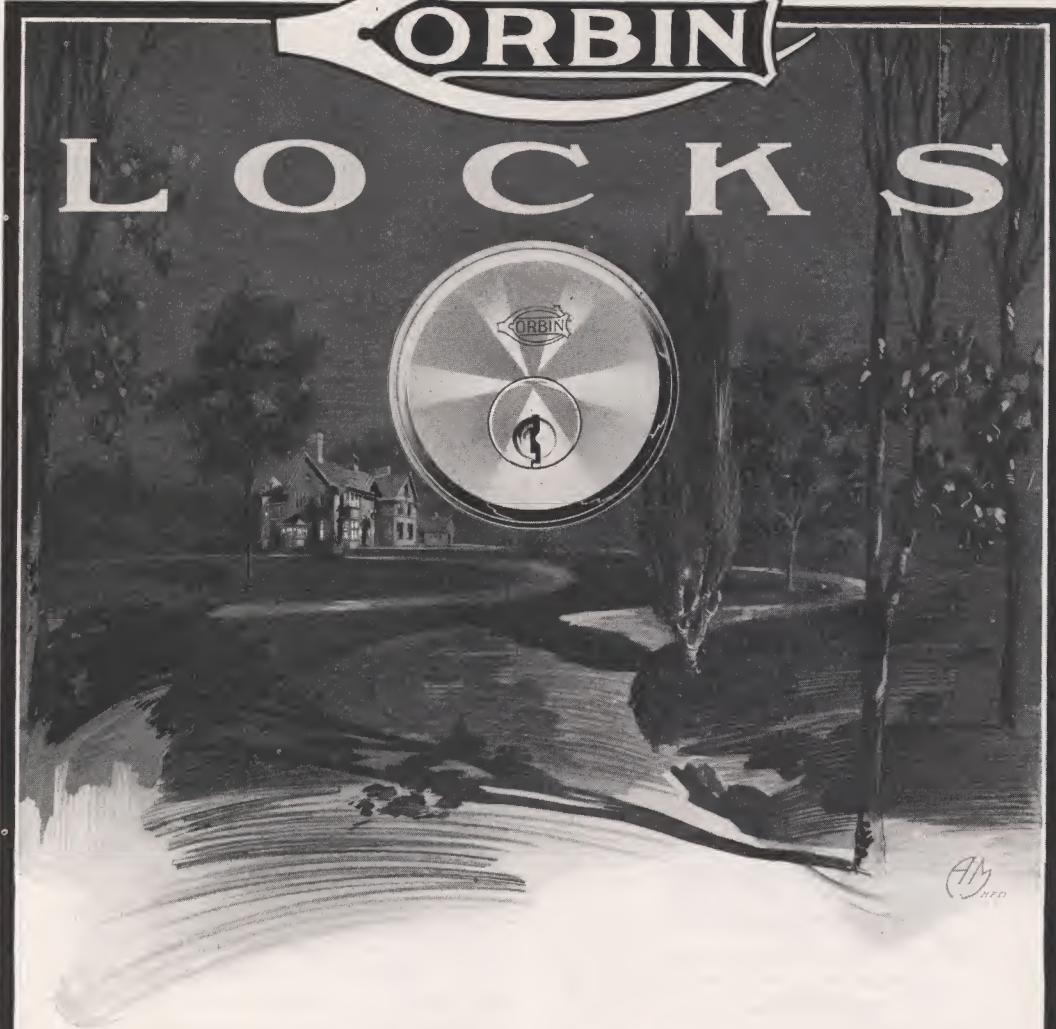
mond shaped in frame, looking not unlike ground glass.

The finish of the walls is natural concrete rubbed down with a concrete brick and painted with Portland cement which has stood in water 24 hours. This makes quite a white finish. The stairs are concrete, tread and risers red concrete containing a sprinkling of white marble, with iron balusters and narra cap rail and narra newell posts. The ceilings of rooms below are 14 feet high and heavily beamed; those above are the same height, likewise beamed. Partition walls above stairs stop 2 feet 10 inches short of ceiling, with an occasional pillar in the partition walls going to ceiling to support roof. There is a pillar standing in the open at corner of stair well in upper hall. The balustrade around porches and terraces are also of concrete with plain vertical open spaces. The floors of the porches and terraces are venetian red cement. Both interior floors are finished in meter squares of colored troweled cement as follows.

Below stairs: Sala—bright red; dining room and living room ultramarine blue; den—brownish red; back hall—yellow; kitchen—Venetian red.

Above stairs: Study and all bed rooms—ultramarine green; hall—dark brownish red; porch—iron oxide; sleeping porch—venetian red.

Battleship linoleum will ultimately, no doubt, be used for both floors throughout, except kitchen and baths, and held to concrete slab by means of the usual spe-



CORBIN

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## For Isolated Homes

Give the protection their exposed location makes necessary.

Circular KK88 explains. Sent upon request.

P. & F. CORBIN Division

*The American Hardware Corporation*

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Philadelphia

# INSIDE THE HOUSE

cial cement for the purpose. Cork carpet was thought of for bed rooms. We would like each bed room different in color. Should a border be used? If so, one of the fancy made borders or just a plain strip of another color?

We can secure this linoleum easily here in the usual colors or they will make it to special order as follows:

Scarlet for sala and in alcove at foot of stairway; Terra-cotta or blue for the den; Green for the dining and living room, and Brown for the back hall.

All corners and angles are rounded. I want a sanitary house in general, and therefore do not look with much favor on rugs and pictures and other hangings which collect dirt. Remember also that this is a hot country.

The furniture should, I think, combine the idea of simplicity with richness and durability; something that will look cool and give an idea of spaciousness. Very fine narra furniture can be made here after any design. I am rather inclined to some sort of colonial design. We do not want upholstery as it is unsanitary and hot. Cane bottoms look well in the native hardwoods.

All windows and outside transoms have iron grills, and the doors opening onto porches, above stairs, will eventually have folding iron grills. What color shall we paint these grills?

The winding stair to roof is of concrete; it is enclosed, with door at entrance to stairway.

I am inclined to a warm red treatment of the "sala" or reception hall.

Please make your scheme positive and explicit and not too expensive, as means available at present are quite limited for this purpose. Something that I can hand to my builder and have carried out.

The house is suburban, being situated a few miles from Manila. It faces slightly South of East and the flat roof is enclosed by a solid wall parapet with panel effect. The roof cornice is two feet wide.

The dining and living rooms, first floor, are separated by a middle column and two arches. Each of these spaces under the

arches are closed to 6 feet by means of two dwarf walls, which in turn support two other small, many sided, columns which run to a cross piece, which latter extends from middle column to main wall on each side. There is a large projecting face of a pillar opposite big center columns in each main wall from which the arches spring. It is constructed entirely of cement.

It is intended to place jardinières containing small palms in the spaces as indicated. There are some nice ones carried by the Indian stores here.

Ans.—In laying out the color scheme for your new home, the light, air and comfort are the most important points to consider in your hot climate.

The colors of your different rooms should blend into one another in such a way that the casual observer does not realize that there is a definite color scheme.

Consider the walls simply as a background and treat them in soft tones and as you do not care to use many rugs, pictures and hangings, we would suggest a generous use of palms, ferns, etc., in richly colored jardinières of metal and concrete.

By reason of the climate, doors and windows will probably remain open the year round, so we would advise careful study of the possibilities of beautiful vistas through these openings, by the thoughtful arrangement of paths and groupings of shrubbery and flowers. This you should plan in conjunction with someone in your city who specializes in landscape work.

In suggesting a subdued treatment of the walls, we have in mind that these framed vistas would make the most charming pictures you could have for your home.

It is surprising how running water will reduce the temperature of a room on a hot day. Why not have a small fountain and pool with water rippling over the edge and falling among ferns and flowers banked within a marble curb and carried off through a small concealed drain? If carefully worked out it is surprising how

# Heat Control

This device takes complete and accurate charge of the drafts and dampers of any style of heating plant burning coal or gas.

The real comfort and health it affords in rightly and evenly heated rooms is worth every penny of the cost and during a lifetime of continual and dependable service repeatedly repays its purchase price in a daily saving of fuel.

## **The "MINNEAPOLIS HEAT REGULATOR**

"THE HEART OF THE HEATING PLANT"

is more than human in its satisfaction.

The action is entirely automatic at all times and the clock attachment can be easily adjusted so that it will operate for an exact lower degree for the night and again in the morning at any set hour operate for a return to the warmer daytime temperature.

Sold by your heating man or hardware dealer and easily and quickly installed with a guarantee that it will prove entirely satisfactory in every way.

### *Write Us For Booklet*

*Showing all Models with descriptions and prices*

### **MINNEAPOLIS HEAT REGULATOR CO.**

Wm. R. Sweat, Pres.

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## **Beat the High Price of Coal**

Escape the discomforts of a cold house, poor ventilation and drafty rooms—

Anticipate the comfort requirements of your home now and insure it in midwinter by equipping it with



### **Combination Storm and Screen Doors, and Morgan Storm Sash**

Comfort-loving, thrifty home-owners know that Morgan Cold-weather Protection means warmth and comfort on coldest days; that it makes for LOWER FUEL COSTS, fresh air and family health.

Morgan Combination Storm and Screen Doors and Storm Sash are made of selected, well-seasoned materials with the same care characterizing all Morgan Products. While built primarily for service, they harmonize in appearance with standard designs.

*Send today for the  
"Cold Weather Protection" Booklet*

### **Morgan Sash & Door Company Dept. C-37, Chicago**

Morgan Co., Oshkosh, Wisconsin  
Morgan Millwork Co., Baltimore

*Exhibits of finished Morgan Model Doors in all principal cities. Ask for list*

# INSIDE THE HOUSE

much joy and satisfaction can be derived from a tiny flow of water. The hotter the day, the more one appreciates its musical sound. Why not make the fountain a feature of the living room by placing it against the middle column between the two arches opening into the dining room?

The narrow spaces between the three columns could be filled in with a trellis or lattice and a profusion of vines allowed to run riot over this trellis and through the grilles of both arches. Singing birds should be suspended in wicker cages, from the ceiling, and adjacent to the fountain.

As for the wall treatment, we should much prefer a perfectly flat paint to a tint or a water color. An ordinary flat paint may be made from white lead and turpentine.

The living room and dining room will appear to better advantage if treated in the same color. We should suggest a cool gray green with the ceiling in a lighter tone. We would also carry this treatment into the stairway and through the entire upper hall.

If you decide to use any hangings at the windows, we would suggest fastening a 1½ inch metal pole (in same finish as hardware of room) to the walls, 6 inches above the windows and extending 2 feet beyond the opening on each side. On each pole we would hang 2 lengths of 50 inch chintz or cretonne, attached to rings and arranged with traverse cords so that they may be closed when desired. When not drawn over the openings, these two

strips should occupy the two foot space at each end of the pole. This chintz should show gorgeously colored birds and tropical flowers on a neutral gray or tan ground with deep rose predominating in the flowers and cool green in the foliage.

A generous use of mirrors would add spaciousness to your rooms; not the conventional mirror in massive frames, but large sheets of plate glass filling the entire wall spaces and extending from floor to tops of doors and windows, and finished with a narrow simple moulding colored to match the wall.

We would suggest the following color schemes for the chambers; a cool French gray with the ceiling in ivory. A light cream with ivory ceiling. A delicate shade of pink or blue, and a cool green with ivory ceiling. The study may be in creamy tan with battleship brown for the floor covering.

The folding iron grilles we would certainly have a dead flat black.

We do not advise a border incorporated with the linoleum, but would rather see it perfectly plain. If you wish to break up the plain spaces, we would suggest using a few thin grass mats which we imagine would be easy to obtain in your country. If you prefer a border, we would suggest two plain bands or lines, two inches wide and four to six inches apart; the outside line about 9 inches from baseboard. Have the bands 3 shades darker than the body color.

## *Decorative Service*

HERE detailed plans for HOUSE DECORATION are desired with samples and prices of wall paper, fabrics, window drapes, etc., the moderate fee of \$1.00 per room or \$5.00 for the entire house will be charged to defray the expense of our decorator's time in working up the plan, securing and mailing samples. Address

Keith's Decorative Service,

Minneapolis, Minn.

## BOWDOIN and MANLEY

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New York City

## *Furnishing and Decorating Town and Country Houses and Bungalows*

SPECIAL DESIGNS FOR WALL PANELS AND FRIEZES  
in the formal rooms and nurseries, kitchens and bed-rooms.

Write for information.

"Beautiful Birch for Beautiful Woodwork"



*Beautiful*  
**birch**

### Birch—Standard Hardwood

"Beautiful **birch**" is America's ornamental hardwood.

It is so fine for interior trim, furniture, veneered doors, and hardwood floors, that it seems almost a pity to hide its charms under a covering of white enamel. Yet since there is no wood better adapted to this purpose, what is one to do?

White enamel asks a good deal of hardwood—and **birch** answers every requirement—**birch** has a very hard, close grain, therefore it takes and holds the enamel perfectly. It's practically mar-proof, as a white enamel must need be.

This is only a synopsis of the big, interesting, profitable **birch** story in the latest **birch** book.

Don't build until you read about "Beautiful **birch**" for varnished trim and furniture as well as enamelled. We'll send the book FREE, with a set of little **birch** panels, in different finishes (including white enamel) for the asking—ask today.

Northern Hemlock and Hardwood Manufacturers' Association

203 F. R. A. Building, Oshkosh, Wisconsin.

### For White Enamel, Too



*Beautiful*  
**birch**

*Scene: Mrs. Homebuilder, Her Architect and Her Painter visiting a Bridgeport Standard Service Department and Selecting the Finishes for Her New Home.*

Mr. or Mrs. Homebuilder: At the nearest Bridgeport Standard Service Department you can see all of the latest wood finishes on Real House Trim, Real Model Doors, Real Flooring and Real Wallboard. You can tell just what the finished job will look like before it is started. Until you have really seen the beautiful new browns and grays which leading architects are specifying, you cannot realize the wonderful possibilities in the finishing of interior woodwork with

**BRIDGEPORT STANDARD**  
**WOOD FINISHES**  
Stain — Filler — Wax — Varnish

That's just what our Service Departments are for—to show you these beautiful new effects, and to co-operate with you, your architect and your painter in carrying out your individual ideas for an entire house or a single room.

*Write for list of Service Departments—also for samples of woods you are most interested in. Address Box 202.*

**The BRIDGEPORT  
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# INSIDE THE HOUSE

## HOUSEHOLD ECONOMICS

### A Portable Range

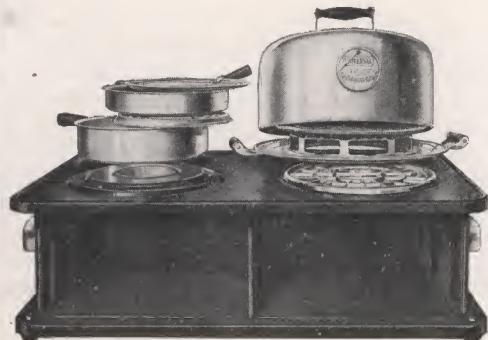


**I**HE time will soon come doubtless when the "Kitchenless Restaurant" will be the latest thing; when a neat maid with an electrical appliance on a little table will

serve a group of tables where the patrons can give their orders direct and watch her prepare their favorite breakfast or lunch "just to a turn" under their own direction, and receive them piping hot.

The tendency for some time past in things electrical, has been toward breakfast-table cooking. There are devices on the market by means of which practically any breakfast dish may be prepared at the table. The round or oblong grill with a tray under and one over the electric plate which broils and toasts and boils, is well established on many breakfast tables all over the country. It is now possible, by means of a portable oven which sets over this round grill to bake muffins or apples electrically, either at the table, or elsewhere. The tray under the hot plate may be used for broiling or toasting at the same time that the oven is being used.

There are several types of portable oven or ovenets on the market, dome-shaped in effect, in one or more sections; a device which fits over the round grill and in which even beef may be roasted, we



The portable oven sets over the grill.

are told. It has a thermometer attachment which registers the amount of heat. The grill itself may be regulated to four degrees of heat, the thermometer registering the amount of heat developed in the oven.

#### Saving the Garden Produce.

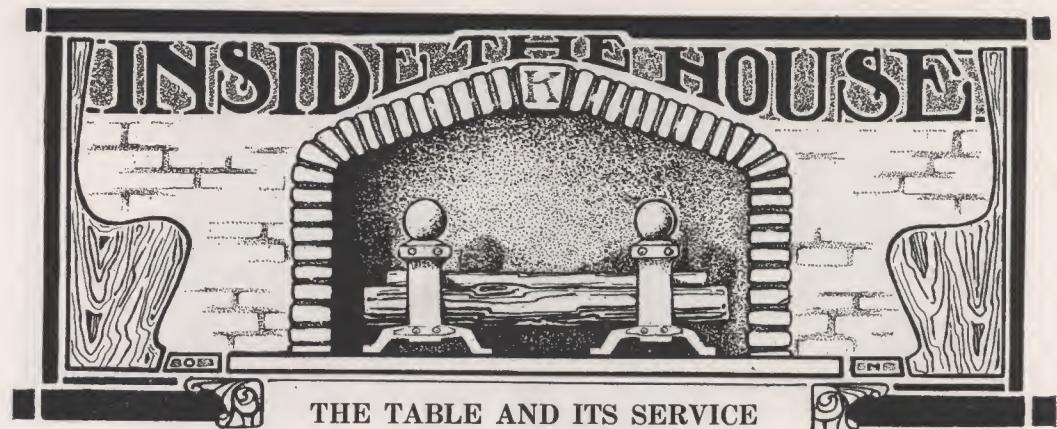
The products of the summer gardens may be stored very largely, under proper conditions. The ordinary unheated basement is all right for the storage of root crops. Vegetables may be packed in boxes with alternate layers of earth and sand, and remain crisp late in the spring. Onions must be kept cool and dry, hung in splint baskets, or spread on shelves. Squashes, pumpkins and sweet potatoes may be placed on shelves or in slatted crates in a warm, dry room as a temperature of 60 or 70 degrees F. is better than a lower one. They must be kept in a free circulation of air or they will rot.

**REMEMBER—That the Food Pledge which you have made, to conserve wheat, meat, fats, etc. is a serious business,—it may win or lose the war.**



*Home of Clarence A. Earle, Copeland Heights, Toledo, Ohio.*  
*Thatched "CREO-DIPT" Stained Shingles used for Thatched Roof.* Color as weathered straw.  
Furnished by  
CREO-DIPT COMPANY, Inc., North Tonawanda, N. Y.  
Sole Manufacturers.

Working drawings of construction of Thatched Roof, standard specifications and instructions for design and construction of same, furnished on request by manufacturer.



THE TABLE AND ITS SERVICE

## The Honor System of Eating

**I**MAGINE eating breakfast with a pair of scales on the serving table to weigh out the bread allowance (and one hears nothing of its being toasted) for each individual. That is what they are actually doing now in England.

Imagine there not being enough food to give each person a portion if the big fellows, and those who can, take more than they actually need. Do you remember how it was the day an unexpected guest came to dinner and the pie would not go around except as Mother cut all of the pieces a little smaller than her usual generous allowance? England is cutting her pie now so that every one shall have a piece, and America is looking over the pies on her pantry shelf, as the housekeeper used to do in the days when she baked only once a week, and counting the places at her table for tomorrow to see if she will have enough to go around.

The system of bread tickets as in use in Germany tends to work a hardship on those who can least bear it, so England has adopted a voluntary Honor System where the individual accepts the national scale of rations suggested by the government, we are told by Ruth Wright Kauffman, who was on the spot.

They are trying to see "eighty million slices of bread saved every day by forty million self appointed food-controllers."

**REMEMBER—That the Food Pledge which you have made, to conserve wheat, meat, fats, etc. is a serious business,—it may win or lose the war.**

Every housewife can control her own kitchen,—it may not be easy but she can do it. Women are not called to the trenches; they are called to Captain their own households, and are told that the "Kitchen is the Key to Victory."

These are some of the things English women are studying:

Eat less bread—Do not use bread, which will let others starve, when rice or mush or string beans can take its place?

Use corn flower (corn starch) and patent barley to thicken soups and sauces.

Cheese and beans are a substitute for meat.

Should starch be used in laundries?

And especially what we must do as well as they is to

Buy wisely,  
Cook wisely,  
Eat wisely,  
Waste nothing.

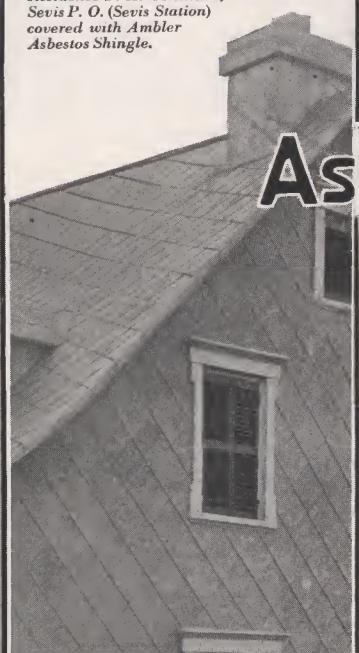
**The Important Questions, "What to Eat" and "How Much to Eat."**

The simplest diet is best, from the point of view of health and nutrition, provided it includes foods so ordered as to perform their real function of nutrition.

Tables have been published from time to time in this and other magazines showing the composition of the more usual foods and their nutritive and other values, and also their values as estimated in calories. We are told that three thousand calories per day are sufficient for



*Residence F. X. Conillard,  
Sevis P. O. (Sevis Station)  
covered with Ambler  
Asbestos Shingle.*



## AMBLER Asbestos Shingles — the most sensible roof covering

An architect who had specified Ambler Asbestos Shingles for the roof of a modest-priced bungalow was asked why he had done so. He replied:—"Because they are the most **sensible** roof that can be put on."

They are fire-proof, weather-proof, do not fade and will last as long as the foundation. Then too, the first cost is the only cost.

Made of Portland cement re-inforced with long asbestos fibre. Three colors—Newport gray, India red and blue-black.

Equally appropriate for modest homes and magnificent mansions. Write for book of photographs, samples, and prices.

*We are always glad to send literature, samples and prices.*

**KEASBEY & MATTISON COMPANY**

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*Manufacturers of*

Asbestos Shingles, Asbestos Corrugated Roofing and  
Siding, 85% Magnesia Pipe and Boiler Cover-  
ing and Asbestos Building Lumber.

# INSIDE THE HOUSE

a man weighing 150 pounds, doing work which gives him only light exercise. Typical menus worked out by Dr. Wiley give something under this amount as a sufficient and satisfactory nutrition. Dr. Wiley cautions us that nutrition does not consist alone in building the body, restoring waste, and furnishing heat and en-

cereals it is found largely, if not almost entirely in the bran and germ, and not to any extent in the starchy parts. Thus it would seem that if fruit and vegetables cannot be obtained, it is desirable to use whole grain flour, on account of the mineral matter and the cellulose as well as for the vital principle.

## Typical Menus By DR. WILEY Giving satisfaction Nutrition

<i>Breakfast—I.</i>	Calories	<i>Luncheon.</i>	Calories
Bread, 3 oz. (2 slices).....	225	Whole wheat bread, 3 oz. ....	225
Egg, 1 oz. ....	100	Butter, $\frac{1}{2}$ oz. ....	112
Bacon, $\frac{1}{2}$ oz. (3 or 4 slices) .....	95	Milk, 1 pint .....	325
Butter, $\frac{1}{2}$ oz. ....	112	Potato, 5 oz. ....	120
Apple, 5 oz. ....	96	Total .....	782
Milk, 16 oz. (1 pint).....	325		
Total .....	953		
<i>Breakfast—II.</i>	Calories	<i>Dinner.</i>	Calories
Bread, 6 oz. (4 slices) .....	450	Chicken soup, $\frac{1}{2}$ pint, .....	50
Apple, 5 oz. ....	96	Meat, $\frac{1}{4}$ lb. (1,000 calories per lb.) ..	250
Milk, 16 oz. (1 pint) .....	325	Whole wheat bread .....	450
Butter, $\frac{1}{2}$ oz. ....	112	Butter .....	112
Sugar, $\frac{1}{2}$ oz. ....	60	Potato .....	120
Total .....	1043	Sugar, $\frac{1}{2}$ oz. ....	60
		Salad, Tomato, 2 oz. ....	112
		Total .....	1,154

ergy, but that a certain vital principle must also be included. The scientific study of nutrition in the last ten years has discovered something of this element, which has been called "vitamin" and is contained in practically all vegetables. The lack of foods containing this vital principle is what has caused scurvy in the days when vegetables could not be kept and transported as they are at present. It is found in all vegetables, in abundance, spinach, cabbage, peas, beans; both in tubers as in potatoes and in the leaves and in nearly all succulent vegetables and fruits, especially oranges and apples. In

"It is a strange notion and yet one of universal vogue, that the person who is doing extra hard work, such as a soldier on the march, needs great quantities of meat. This is wholly erroneous," says Dr. Wiley. "The person who is to undergo the severest bodily exercise and tolerate the greatest fatigue should be fed principally cereals, especially wheat, corn bread and rice. It is sugar and starch, and not lean meat that gives physical vigor and endurance. If a reasonable amount of fat, bacon, butter, oil, lard, is provided, the ideal ration for hard service is at hand."

**REMEMBER—That the Food Pledge which you have made, to conserve wheat, meat, fats, etc. is a serious business,—it may win or lose the war.**



From an original oil painting  
Made especially for  
The Lowe Brothers Company  
by W. B. King, of New York.

## LOWE BROTHERS *Mellotone*

TRADE MARK REGISTERED

**B**eautiful flat tints for walls, holding their freshness and charm for years . . .

"The House Outside and Inside," enlarged edition with color plates, on request.

Indicate whether interested in interior or exterior work.

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Jersey City Minneapolis

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## Make Every Room An All-Weather Room

WITH this new type, trouble-proof casement window you can instantly adapt any room to any weather. In hot weather you can make your living room, dining room and bedrooms like open porches—with a clear sweep for every breeze and an unobstructed view. In cold or stormy weather you'll be much more comfortable than with ordinary windows—Whitney Windows are absolutely tight and storm-proof when closed. Double-glazed sash can be used, which does away with the need for storm windows.

Whitney Windows are not like the ordinary hinged casement windows. They never rattle or slam shut, always work smoothly and quietly. They open outward, out of the way of shades, curtains and furniture. Give perfect control of ventilation. We manufacture only the patented

## WHITNEY CASEMENT WINDOW HARDWARE

and screen fittings—use any style sash you wish. If you cannot get the sash locally, we will quote you on your requirements complete, f. o. b. Minneapolis.

Our service department will help you, without charge, to adapt Whitney Windows to any unusual requirements, furnishing you with drawings and specifications that will enable your contractor or carpenter to make successful installation.

**FREE**—Write for interesting portfolio of artistic and practical casement window designs for different types of homes.

If West of Mississippi River or in Wisconsin, address—

If East of Mississippi River, address—

**Whitney Window Corporation,**  
311 Fifth Street South,  
MINNEAPOLIS, MINN.

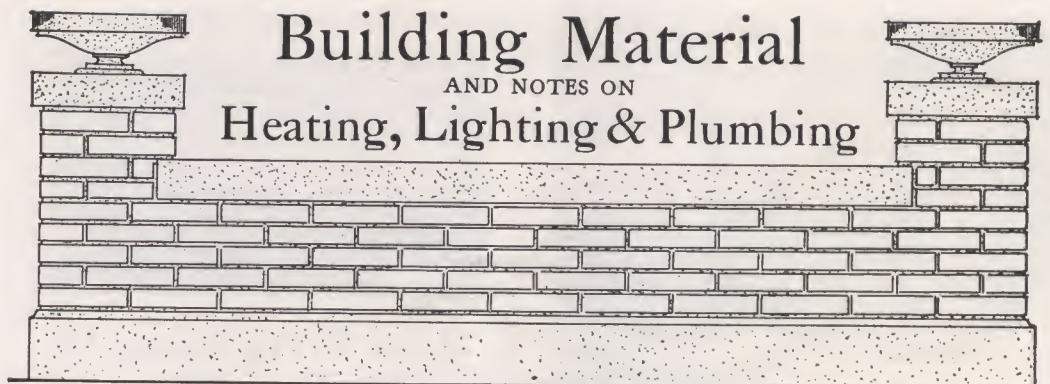
**H. E. Holbrook Company,**  
445 John Hancock Building,  
BOSTON, MASS.



This shows the Whitney hinge that is fastened to top of sash. The roller runs in a groove.



This shows the Whitney hinge that is fastened to bottom of sash. It has a shoe that slides in a waterproof metal track.



# Building Material AND NOTES ON Heating, Lighting & Plumbing

## Magnesite Stucco

An Oxychloride Composition That Sets Hard and Yet Possesses Flexibility



HE word stucco is in a general way used to refer to any kind or type of plaster utilized for the external coating of buildings.

Nearly every kind of Portland cement, lime and gypsum has been used for exterior stucco work as well as mixtures and various combinations of those materials.

Only in recent years has Magnesite Stucco been commercially exploited for exterior stucco work, although this composition has been employed as a building material for something over fifty years. It has even been stated, and it is not im-

probable that some of the remarkable plaster and cement work done centuries ago by the Romans and Spaniards, the process of which has not been discovered, was constructed with magnesite compositions, compounded by them. Certainly astonishing strength and durability exhibited in some present examples of this material might readily give strength to that theory.

However, be that as it may, our interest in this discussion will be centered on the adaptability of Magnesite Stucco, for different types of construction, certain unusual properties that are possessed only



A liquid chemical is used instead of water in mixing Magnesite stucco.

# KELLASTONE

IMPERISHABLE STUCCO



Reduce Building Costs By Using

## KELLASTONE MAGNESITE STUCCO

Cut the high cost of building material, yet improve the quality by using Kellastone.

Build for permanence yet at the same time increase the beauty—use Kellastone.

Build a home that is **fireproof** and **waterproof**—no other stucco than Kellastone will accomplish this.

### Kellastone Absolutely Will Not Freeze

If you are interested in learning about one of the greatest and most wonderful building materials in existence, the only stuccoing material in creation that may be termed **CRACK FREE**.

*WRITE FOR BOOKLET No. 25, which tells about Kellastone a remarkable MAGNESITE STUCCO.*

**THE NATIONAL KELLASTONE COMPANY**  
1323 Mallers Building, Chicago, Illinois

by this product and brief reference to its application.

In either new or remodeled building the inevitable question concerning wall construction comes up for decision. Brick, stone, frame, and stucco all have their advantages and disadvantages, while one



Adapted to remodeling work.

type is better suited for certain definite purposes than the other.

Brick, stone and reinforced concrete are at once conceded to be ideal for heavy mill and factory construction as well as for the huge office buildings now predominant in our metropolitan centers.

For residential work, however, stucco undeniably takes its place as the most versatile material for exterior wall building. It adapts itself to practically every type of architecture, it combines economy in first cost with that of moderate expense in upkeep, it is substantial in appearance, is fire-resistant and is equally effective whether used on the modest cottage or the palatial mansion.

In order that the reader may understand the difference between Magnesite Stucco and other materials ordinarily used for that purpose, it will be advisable at this point to give a brief description of the nature of this material.

Magnesite is a dense white ore mined in rugged mountainous country and is burned in great furnaces under specified temperature to eliminate certain of its contents and to reduce it to a caustic state. It is then pulverized as fine as flour; after which it is ground and mixed in large agitating machines with other

mineral ingredients, producing what is known as Magnesite Stucco powder. This stucco powder is put up in bags containing one hundred pounds each, which are delivered to the job much the same as cement and plaster. Magnesite Stucco, however, is not mixed with water; a liquid chemical solution supplied by the manufacturers being used instead. This solution is shipped in heavy steel drums holding about 30 gallons each. This liquid is mixed with the powdered product in a regular plasterer's mixing box at the job when the stucco is being applied.

In considering the particular characteristics possessed by Magnesite Stucco it must be remembered that this material



Magnesite may be used over any surface.

contains no Portland cement, lime, gypsum, plaster-of-paris or any similar ingredients. The hardening or setting up process is the result of a chemical reaction caused by the uniting of the caustic magnesite powder and the liquid chloride solution. The ingredients combine into a tough seamless mass as hard as granite yet not brittle. When thoroughly set and cured, Magnesite Stucco attains remarkable tension and tensile strength many times greater than that of other materials hitherto used for stucco purposes. Some idea of its powers of resistance may be gained when it is learned that a properly made article will stand crushing pressures in excess of 10,000 pounds per square inch.

Furthermore, the chemical action causing Magnesite Stucco to harden also causes it to contract or draw closely together all particles of which it is composed, thus producing a very dense, non-

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porous coating excluding the entrance of moisture.

It is the absorption of moisture which has been a source of considerable trouble with ordinary stucco, particularly in the winter season after an all-day rain, a sudden change in temperature to many degrees below freezing allows frost to enter the stucco which naturally cracks from expansion.

Magnesite Stucco may be bent or deflected several inches out of line in a span of eight feet. This property is of vital importance in preventing the stucco from cracking from strains and stress, always prevalent in buildings. In addition to this, it is dead to expansion and contraction induced by temperature changes. By being immune to this attack by powerful force, Magnesite Stucco conquers the most destructive element that causes stucco to crack. No doubt this is why it has become known as a crack-free stucco.

Magnesite is one of the most fire resistant materials known. It is used to line the great furnaces in steel mills, blast furnaces and smelters throughout this and other countries. On account of its fire resisting properties, it will protect wood surfaces, over which it may be applied, from exposure to a very hot flame for a sustained period. This fact shows its quality as a fireproof exterior coating.

Magnesite composition is also an efficient insulator, and is very valuable as a protection both against hot and cold weather, thereby adding comfort to the home and saving of coal bills.

From the viewpoint of the architect and contractor, one of its most valuable characteristics is its adhesive or bonding properties. Magnesite Stucco, unlike other forms of cement and plaster stucco, does not depend on clinching or keying to hold it in place. Instead, it will adhere or attach itself to surfaces over which it may be spread, taking hold so tenaciously that it is difficult to separate it therefrom. On this account it may be used over any kind of building surface including wood lath, metal lath, hollow tile, reinforced concrete walls, either new or old brick walls, various kinds of patent stucco boards and patent sheathing.

Because of the fact that this stucco is mixed with a chemical liquid rather than with water, it will not freeze or be injured in the least, even if applied in zero

weather. This will permit stucco work to be carried on safely throughout the winter months, even in freezing weather.

Magnesite Stucco is particularly adapted for overcoating and remodeling old brick or frame houses. The work may be done without removing the siding or without disturbing the occupants of the property. Beautiful and distinctly unique granite dash finishes are produced with this material. Color effects harmonizing with the architectural scheme are created by mixing stone, granite and marble chips of various shades, and casting them into the finish coat at the time of application. Color effects thus created cannot fade.

No special tools, equipment or apparatus are needed to apply this chemically made stucco.

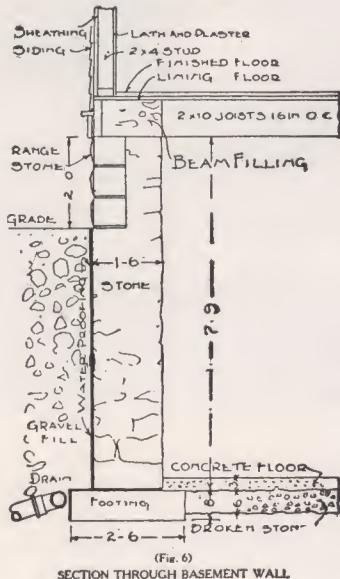
All surfaces over which it is to be plastered are first treated with a spray or brush coating of the liquid solution over which a brown or base coat is spread so that it will cover the surface not less than  $\frac{1}{4}$  inch in thickness in all parts. After this base coat has set or hardened it is then sprayed with the mixing liquid and immediately followed by the application of the second or finish coat which is darbied and floated true and even. While this finish coat is still very fresh and soft, dash aggregate of the desired size and colors is cast forcibly into the soft finish coat and lightly patted with a float to bring all particles in contact with the fresh stucco. Once firmly imbedded the dash remains permanently in place and cannot be removed without using a stout steel tool.

One particularly important point that should be remembered in using Magnesite Stucco is that under no circumstances should this material be applied less than full  $\frac{1}{2}$  inch in thickness. In order to cheapen the work it is sometimes suggested that this kind of stucco be applied  $\frac{3}{8}$  to  $\frac{1}{4}$  inch thick, but to follow such advice would be to commit a serious error, which will result in disappointment. It is far better to apply a Magnesite Stucco  $\frac{5}{8}$  to  $\frac{3}{4}$  inch thick than to have less than a good generous  $\frac{1}{2}$ -inch thickness.

Magnesite Stucco has found favor with the most prominent and progressive architects and contractors, as there is little or no difference between the cost of a job finished with this material and one with ordinary stucco.

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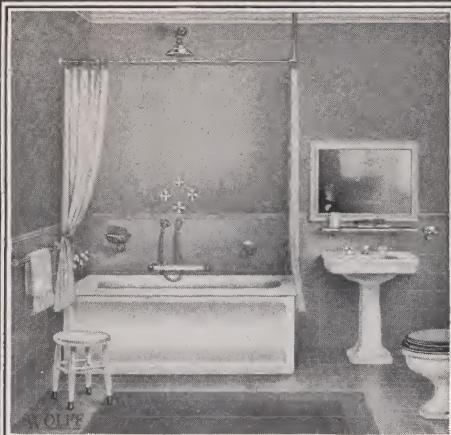
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# WOODS AND HOW TO USE THEM



**EDITOR'S NOTE.**—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH's staff of wood experts. This department is created for the benefit of KEITH's readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

## The True Significance of Wood as a Building Material

Extracts from a Published Address by Wm. Gray Purcell—A. I. A.

**W**E must not get into habits of mind. We must occasionally review even things that seem to be foregone conclusions. We must test even things that we are quite sure we know.

One of our especial habits of mind in regard to architecture that I would like to review concerns the idea of durability. Architects and people generally, believe that to be enduring is one of the first principles of good architecture. It is not the enduring quality of the building that is so important. It is the enduring quality of the ideas and institutions behind it that really counts. The flower by the roadside springs up and lives but a day or so, but it keeps on springing up year after year. The little habitation which the spirit of the buttercup builds for itself soon passes, but the buttercup idea endures and repeats every season.

The difficulty has been that wood has been asked to do what it cannot do *best* and it is very seldom asked to do the very things it can do best. We must insist upon wood being asked to do all the things that it can do so well and so beautifully. It is not right to ask any material to do service that is contrary to its character and qualities.

I had an interesting conversation the other day with a professor in one of our Eastern colleges about metal doors. He was remarking what a wonderful thing these doors have become—how they are now made to resemble wood so closely than an expert simply cannot detect the difference. I told him I thought it was a very unfortunate thing, if the imitation of the wood door was so successful.

The only really wicked thing about an imitation is, that it deceives someone, so it appeared to me if a metal door was a very excellent imitation, everyone would be deceived, and considered as works of art, they would be really abominable; but if the imitation of a wood door in metal was a poor imitation it would deceive no one, and as a consequence no great harm would result.

The quality of architecture, the quality of the work of art, that is most significant and is most human, is the quality of growing old gracefully.

The real trouble with the metal door, where it was made to look like wood instead of being made to look like what it actually was, lay in just this fact—that it could not grow old beautifully. The knocks and scratches of time instead of adding to its human interest, served no



*House on Fresh Pond Parkway, Cambridge, Mass. Charles R. Greco, Architect, Boston, Mass.*

ALL woods have certain uses for which they are especially adapted by reason of the peculiar qualities and characteristics which nature has given them; and on their proper selection for these uses, hinges the whole problem of economy in wood construction.

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better purpose than to reveal its deceit, and The Fine Art of Building is particularly the one where this quality should be carefully conserved and it seems to me that what we want to search for is that quality in our building materials which will enable us to use them so they will grow old in a beautiful way.

The quality of the work of past times which we enjoy most, the one which makes these old buildings perennially the most interesting to us, is the fact that in the old work, as long as the one stone remains upon another, as long as the ancient beam rests upon its post, something of the spirit and vitality of the ancient building remains.

What we want to do first of all is to avoid imitations. Mother Nature soon reveals the shams and it is only the imitation wood, imitation stone, imitation marble, imitation metal work, which never can grow old beautifully.

I would like to make as the real point of my remarks, the great need we have to understand wood as a material. It is not the qualities of wood as a good physical material that we need to know more about, nor am I concerned with a technical understanding of woods and their uses, important as that knowledge may be, but what I do believe to be important is that we should have an intimate understanding of the essential, intrinsic, intimate nature of this material; to be sensitive to its inherent qualities, not only as a building material, but as a part of the world with which we have to live.

We must come to understand wood not merely with the intellect nor with the book of rules which tells how great a load it will sustain, but to know it through having grown up with it, worked with it, and enjoyed it in everyday affairs.

Our children get a certain fine knowledge of the qualities and characteristics of wood in the manual training courses of our high schools, but this opportunity for real knowledge and understanding stops almost as soon as it is well begun.

We must use our wood in such a way that it is not so very important whether we spend much time learning how best to fireproof it; but in such a way must our buildings be fundamentally conceived that we do not care whether a given building be fireproof or not. The idea is

illustrated in a perfectly practical way by school buildings erected of late years on the Pacific Coast. Many one story high school buildings of large size have been built, the rooms opened on both sides, so that the children can pass quickly into the yard in case of an emergency, and let me say here, that far more important than the negative aspect of preventing disaster through fire, is the positive effect upon the children and upon the community of these wholesome open air, close to the ground, close to nature, home-like and human school buildings.

With such possibilities in view, with inexpensive construction in an honest material, honestly expressed; a material that the knocks and scars of time will only make the more beautiful, we can picture to our minds an environment vastly different from the standard fireproof building.

But to insure something more than factory like forms, vital and necessary as they are, we must not only permit the forms of modern American architecture to develop naturally from the construction, mechanics and practical needs of the building, but the problem must also be approached with a poetic insight and understanding of our own times that will permit these forms to become lovely, significant, and expressive of the best in this nation. In this way, and in no other, can a universal Architecture arise which will be worthy of this fascinating modern world of ours,—expressing itself naturally and freely in all materials and exposing to general appreciation the native dignity and fineness of woods in all uses.

We certainly cannot expect to accomplish this in a year or so. We must begin with the educational basis. We must concern ourselves with the schools and see that problems are presented which will encourage active thinking, not only in terms of wood, but careful thinking with regard to the use of all the various materials. Only in this way will the true significance of wood as a building material come to be generally recognized, not only with regard to its own intrinsic quality, but enriched and beautified through contrast and comparison with the special qualities of the other materials.

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# SPLINTERS AND SHAVINGS

## Can American Business Stand the Test?

*From an Address by T. P. Beck, Opening  
the World's Salesmanship Congress.*

**P**ROSPERITY in all industries producing the necessities of life—food, clothing, munitions, utensils and supplies, will be limited during the next twelve months only by capacity to produce and transport. Industries producing the non-essentials may languish. From them both capital and labor may be diverted.

The farmer will produce mammoth crops. He will need quantities of wagons, trucks, plows, harrows, reapers, tractors and binders. And he will have the money to pay for them. His annual cash income has lately averaged about \$1,500. The government estimates that in the next twelve months it will be \$2,500. Think of the purchasing power of 6,500,000 farms.

Will American business men be ready? Will they have the factory and storage capacity, the transportation facilities, to take care of this flood tide of business? Will they prepare constructively on a scale which will give full play to output with minimum waste? Or, will they drift day by day from hand to mouth in a spirit of shortsighted fear and wait for the deluge to engulf them?

The time to build is now, before materials run short, transportation becomes still more congested and labor is drafted into military service.

Some may strain present facilities beyond normal capacity and risk a breakdown. Others may expand temporarily by means of makeshifts. This is waste. Such a mushroom plant must soon be rebuilt. It is never efficient. Facilities should be permanently enlarged and solidly built to stand the strain of huge output. Costs can be reduced through efficiency, and that is possible only in a modern, adequate, constructively planned plant.

After the war, efficiency and low costs

will be indispensable. Peace should find this country wonderfully equipped—its farms developed to yield maximum harvests—its industries geared to the most efficient production. Its railroads and highways capable of handling promptly and cheaply the greatest caravan of merchandise the world has ever seen. Only thus can American business hold its own in the coming trade struggle between nations.

### Portland Cement.

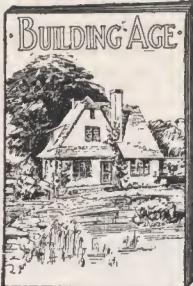
The Portland Cement Association suggests that there is no good reason for writing "portland cement" with a capital "P," since the product is not made in Portland, Me., Portland, Ore., nor at the present time in Portland, England.

The word "Portland" is properly to be considered as a qualifying adjective used to distinguish a kind, not a brand, of cement nor a trade-mark. The case is quite similar to that of "macadam roads," where the word "macadam" has become a common adjective, though derived from MacAdam, the name of the man who invented this type of road. It is believed that departing from the custom of capitalizing the word "portland" will do much to correct the present troublesome misconception.

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Concrete as a representative industrial activity has been one of the recent additions to vocational and industrial arts courses in many schools. As a result of the unusual interest which this work has created, both Chicago and Columbia University, in co-operation with the Extension Division of the Portland Cement Association, offer a course in concrete during the summer session.

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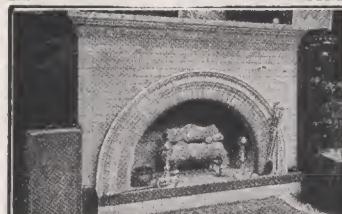
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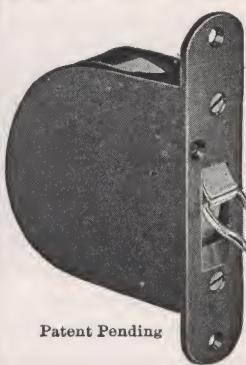
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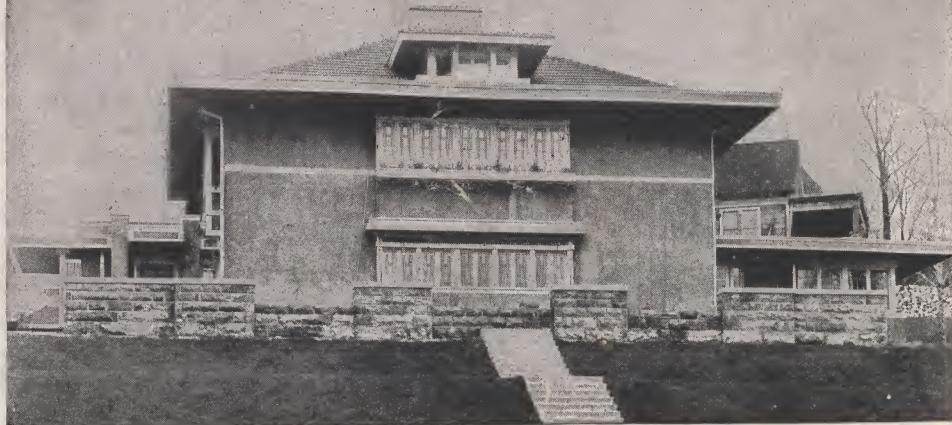
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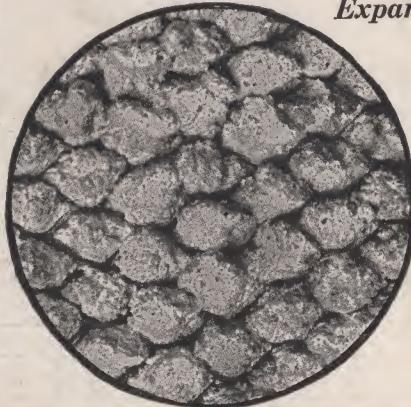
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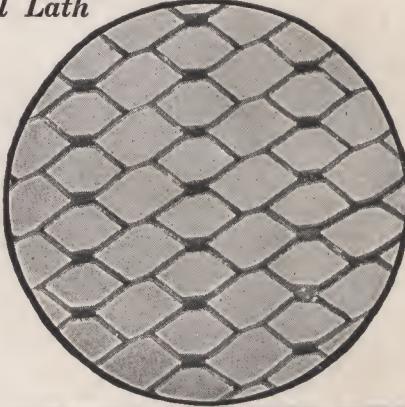
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The "Key" of the stucco to "Kno-Burn" Lath used on the residence above. Reproduced from an actual photograph.

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